BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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Application of Pacific Gas and Electric Company for Approval of the Retirement of Diablo Canyon Power Plant, Implementation of the Joint Proposal, And Recovery of Associated Costs Through Proposed Ratemaking Mechanisms (U 39 E)	Application 16-08-006 (Filed August 11, 2016)

PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) REPLY BRIEF

WILLIAM MANHEIM
CHARLES MIDDLEKAUFF
MARY A. GANDESBERY
GRADY MATHAI-JACKSON

Pacific Gas and Electric Company
77 Beale Street, B30A
San Francisco, CA 94105
Telephone: (415) 973-6648
Facsimile: (415) 973-5520
E-mail: wvm3@pge.com

Attorneys for
PACIFIC GAS AND ELECTRIC COMPANY

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I. INTRODUCTION AND EXECUTIVE SUMMARY

The Parties have come a long way in this proceeding. Since its inception, the Diablo Canyon Nuclear Power Plant ("Diablo Canyon") has been a lightning rod of controversy, dividing many on the merits and risks of nuclear power in California. This long, storied chapter in our history is coming to a close with the proposed retirement of the State's last nuclear power plant.

One year ago, PG&E announced that it had entered into a Joint Proposal with environmental groups, labor and local nuclear safety advocates to retire Diablo Canyon in 2024/2025 and replace it with GHG-free resources, accompanied by a program to mitigate community impacts and retain plant employees during the eight year transition. While the decision to retire Diablo Canyon was broadly applauded, many were skeptical, or downright hostile, to elements of the plan. Over the last year, we listened, we talked, we shifted and we entered into two separate settlement agreements. The gaps between the parties have narrowed significantly and there are just a handful of issues left to decide.

- **Should Diablo Canyon be retired?** Every party but one agrees with the decision to retire Diablo Canyon. There is little doubt that by 2024 and 2025, when Diablo Canyon's Nuclear Regulatory Commission licenses expire, the State's energy policies

and priorities will displace the need for a significant portion of Diablo Canyon's output and that a large baseload power plant like Diablo Canyon is not a good fit given the coming challenges of overgeneration and renewable integration. A few parties ask the Commission to order early retirement of Diablo Canyon by 2019, based on speculative nuclear safety allegations that have been exhaustively reviewed and repudiated by PG&E and the Nuclear Regulatory Commission ("NRC"). Shutting Diablo Canyon down in two years would derail the orderly transition to GHG-free replacement resources, increase GHG emissions, strand over $1 billion in investment, harm the local community and render jobless thousands of plant employees.

- **Should a portion of Diablo Canyon's GHG-free replacement be authorized in this proceeding or the Integrated Resource Plan ("IRP") proceeding?** PG&E has rethought its initial position on this issue and now agrees that the best way to optimize the resource plan, holistically and with the participation of all affected Load Servings Entities ("LSEs") is to address Diablo Canyon replacement energy needed in the 2024 to 2030 timeframe in the IRP. To position the State for success, we believe it is critical to authorize PG&E in this proceeding to start now by holding an RFO in 2018 for an incremental 2,000 GWh of Energy Efficiency ("EE") to be installed by the time Diablo Canyon retires in 2025. An "early action" EE program of this magnitude will have to be ramped up over the next seven years so it needs to be approved immediately. The rest of the replacement procurement (needed from 2024 to 2030) can be timely developed through the existing IRP process. However, PG&E and the Joint Parties ask that the Commission adopt a policy directive in this proceeding that all such replacement power authorized in the IRP must be GHG-free.
- **Is the Tranche #1 Energy Efficiency consistent with the State's goals and in harmony with the Commission's EE rules and programs**? The Joint Parties have

proposed the Tranche #1 EE program as a first step in DCPP replacement that is consistent with the Energy Action Plan Loading Order and statutory mandates for the Investor-Owned Utilities ("IOUs") to first seek cost-effective, reliable and feasible energy efficiency to meet unmet load before procuring generation resources. PG&E has submitted substantial evidence demonstrating that it will need at least 2,000 GWh of additional GHG-free energy when Diablo retires. Tranche #1 is proposed to obtain GHG-free energy replacement resources that would be available prior to the closure of Diablo Canyon. Other non-energy resources such as demand response and energy storage, would not replace Diablo Canyon's energy output, though these resources may be shown in the context of the IRP proceeding to be valuable future resources. Some parties assert that Tranche #1 should be rejected because EE programs and projects might exacerbate overgeneration. PG&E's 's plan to use time-differentiated avoided costs for bid evaluation mitigates this concern by assigning higher value to EE programs and projects during non-overgeneration periods. Some parties take issue with PG&E's proposal to screen offers for eligibility using a cap based on the cost of renewable resources, and to rank offers by comparing the offers' prices to time-differentiated avoided costs. PG&E's proposal to compare the Tranche #1 offers to the cost of GHG-free alternatives and to take bid prices into consideration in ranking offers, is reasonable in the context of acquiring GHG-free EE resources at least cost. Some parties argue that Tranche #1 EE should not be eligible for shareholder incentives. Tranche #1 procurement should not be treated any differently than all other energy efficiency programs, including third party programs which are sourced using competitive solicitations, which are all eligible for a shareholder incentive through the Energy Savings Performance Incentive ("ESPI") mechanism.

- **Is it reasonable to ask customers to help mitigate through a nine year transition period the significant and immediate adverse impacts that plant closure will**

have on essential services in the local community? Retiring Diablo Canyon at the end of its operating licenses will cause immediate direct fiscal impacts to the local community, but the need for essential public services to support Diablo Canyon's operations and to remain prepared for any necessary emergency response will remain constant through at least 2025. The Community Impact Mitigation Program ("CIMP") settlement entered into with the County of San Luis Obispo, six surrounding cities and the local school district provides reasonable and appropriate mitigation for impacts that will occur to the local economy and ability of local governments to provide essential services due to the retirement of the plant. In the same ways that local governments mitigate environmental and community impacts through the payment of fees, it is appropriate and reasonable in this circumstance for the Commission to approve impact mitigation payments that are reasonably related to the burdens on the local community imposed by Diablo Canyon and its retirement. The legislature recently made clear in Senate Bill ("SB")_968 (Monning) that mitigation of local impacts arising from Diablo Canyon's retirement is a matter of public interest.

- **Is the proposed Employee Program adequately designed to retain highly-trained plant workers and ensure plant safety and reliable operations through the end of 2025?** No party opposes the need for an Employee Program designed to retain highly qualified and experienced workers at Diablo Canyon in order to maintain the track record of operational excellence through the end of 2025 when the plant retires. Under the Employee Retention Program, employees commit to staying at Diablo Canyon for a four-year period (Tier 1) and an additional three-year period (Tier 2) and receive annual retention payments that must be repaid if the commitment is not honored. The design of the Program and level of benefits has been reasonably benchmarked against California and industry-wide data. Nonetheless, ORA proposes

to cut the program in half by eliminating the Tier 1 period and only approve retention payments for Tier 2 during the last few years of plant operations. Highly-qualified nuclear power plant workers with other job options in the industry will not stay at the plant due only to the promise of a bump in base pay five years down the road. Tier 1 was specifically designed to retain these market-competitive, highly-skilled workers as well as a large group of retirement-eligible employees who would retire immediately if Tier 1 was eliminated. The Tier 1 program is essential because it establishes a process for structured knowledge transfer from the more tenured employees to the newly hired or less tenured employees that will be counted on to operate Diablo Canyon during the Tier 2 period. Temporary workers or workers from the "local labor pool" cannot adequately replace high levels of attrition at Diablo Canyon. It is therefore critical that the Commission approve the full seven year Employee Retention Program for the workers at Diablo Canyon.

II. RETIREMENT OF DIABLO CANYON POWER PLANT (ISSUE 2.1)

There is strong consensus among the parties that PG&E's proposal to retire Diablo Canyon at the expiration of its current NRC licenses in 2024 (Unit 1) and 2025 (Unit 2) is reasonable and prudent and should be approved by the Commission. [1] There is ample evidence in the record, as discussed in PG&E's Opening Brief, supporting PG&E's analysis that California's energy policies and priorities will have displaced the need for approximately one half of Diablo Canyon's output in the 2025 to 2030 time frame, the first six years of relicensed operation, and that Diablo Canyon's baseload generation is not a good fit for California's post-

[1] This proposal is the foundation of the Joint Proposal by and among PG&E, Friends of the Earth ("FOE"), NRDC, Environment California, IBEW Local 1245, CCUE, and A4NR. Attachment A to the Application. In addition, the following parties either support or do not oppose PG&E's proposal to retire Diablo Canyon in 2024 and 2025: ORA (Opening Brief at p. 4); Joint Opponents (Opening Brief at p. 2); IEP (Opening Brief at p. 7); San Luis Obispo Mothers For Peace ("SLOMFP") (Opening Brief at p. 2); TURN (Opening Brief at p. 1); CEERT (Opening Brief at pp. 12-13); EDF (Opening Brief at p. 2); and CCSF (Opening Brief at p. 3). GPI conditionally supports retirement of Diablo Canyon. (GPI Opening Brief at p. 1).

2030 GHG reduction goals given the challenges associated with renewable integration and overgeneration.[2]

There are a few parties with differing viewpoints. One party, CGNP, argues that Diablo Canyon should continue operations beyond 2025.[3] WEM and SLOMFP urge the Commission to evaluate the potential for early shut-down of Diablo Canyon.[4] PG&E addresses these issues below.

A. The Evidence Does Not Support Operation of Diablo Canyon Beyond 2025.

CGNP argues that Diablo Canyon should continue operations beyond 2025 based upon the following combination of highly questionable assumptions: 1) that Diablo Canyon could mitigate post-2025 contributions to overgeneration by shifting from the current baseload mode of operations to hourly load-following;[5] 2) that the approximately 50% of Diablo Canyon's energy (the portion projected to be of no use to PG&E's bundled customers after 2025) could be sold into the market at a profit if gas prices increase significantly;[6] and 3) that the State Water Resource Board ("SWRCB") would not require PG&E to install cooling towers at Diablo Canyon (estimated to cost up to $13 billion) to comply with its post-2025 Once Through Cooling ("OTC") regulations.[7]

If we knew today that all of CGNP's assumptions would actually occur, it would strengthen the case for continued operations of Diablo Canyon. However, lacking perfect foresight, the Commission must evaluate Diablo Canyon relicensing based on the evidence available today, including reasonable forecasts. PG&E has considered all of the factors raised by

[2] PG&E Opening Brief at pp. 10-18.

[3] CGNP Opening Brief at pp. 20-42.

[4] WEM Opening Brief at pp. 2-8; SLOMFP Opening Brief at p. 17.

[5] CGNP Opening Brief at p. 40-41, line 8 to p. 41, line 6.

[6] CGNP Opening Brief at p. 18, line 8 to p. 19, line 12.

[7] CGNP Opening Brief at p. 20, line 7 to p. 24, line 3.

CGNP and reasonably concluded that it is not in the best interests of customers to continue to operate Diablo Canyon beyond 2025.

1. Diablo Canyon Is Not Currently Capable Of Hourly-Load Following And There Is No Evidence To Suggest It Could Change Operations To Mitigate The Challenges With Renewable Integration.

CGNP states that flexible operation of DCPP is "certainly possible" and "might directly help mitigate overgeneration" but it offers no evidence to support this conclusion.[8] The evidence in the record is that Diablo Canyon was licensed and is designed to operate at full power (e.g., baseload). Operating in load-following mode would take Diablo Canyon outside of the currently authorized NRC license conditions and would require extensive technical feasibility studies, redesign of procedures, processes and systems, maintenance practices and nuclear fuel redesign.[9] While there are a few pressurized water reactors ("PWRs") in Europe that perform daily load-following, these plants were specifically optimized and designed for this purpose. The United States fleet of PWRs do not operate in this mode (with a few exceptions where plants are capable of making minor ramping changes in plant output).[10] It is unclear if Diablo Canyon could be retrofitted to safely and reliably operate in a different operating mode, whether the NRC would approve it, and whether it would be cost-effective to do so given the reduction in capacity factor that would result if Diablo Canyon were to be frequently ramped down to minimum operating levels during the daytime hours when solar power is prevalent.

2. PG&E's Analysis Projects That Post 2025 Market Sales Of Surplus Diablo Canyon Energy Would Not Significantly Enhance Plant Cost-Effectiveness.

While CGNP concedes that a large portion of Diablo Canyon's energy is not needed for PG&E's bundled customers, it argues that this unneeded energy could be sold at market and that

[8] CGNP Opening Brief at p. 40, lines 8-19.

[9] Ex. PG&E 5-1 at p. 1-5, line 10 to p. 1-6, line 8 (Strickland).

[10] Ex. PG&E 5-1 at p. 1-5, line 10 to p. 1-6, line 8 (Strickland).

such energy could be profitable. CGNP predicts that, if gas prices increase substantially, the market revenues from sales of Diablo Canyon's surplus energy would be "substantial" and that "some of these could be applied to reduce rates for PG&E's bundled customers."[11] CGNP does not say how much gas prices have to go up to make Diablo Canyon profitable in the market and it doesn't explain why there would be demand for such surplus energy given the projected increases in compliance targets for renewable energy and other preferred resources in the post-2025 time frame, which would tend to displace and reduce the need for natural gas resources.

PG&E's need analysis did assume that all energy not needed by PG&E's bundled customers would be sold to the market. As shown on Table 2-6, below, the "projected market sales benefit" was subtracted from the gross costs of Diablo Canyon to yield a "net unit cost" for Diablo Canyon on a $/MWH basis. In the Reference Case, PG&E assumed that there would be approximately $422 million in annual market revenues in 2025 and that this would grow to $532 million by 2030.[12] This resulted in reducing the 2025 Diablo Canyon project cost from $189/MWH to $141/MWH. However, even adjusting for market revenues, the post-2025 forecast of Diablo Canyon's costs is significantly higher than the projected cost of replacement resources.

TABLE 2-6
LICENSE EXTENSION ANNUAL REVENUE REQUIREMENT FOR DCPP
(NOMINAL DOLLARS)[13]

	2025				2030			
Category	DCPP Total	High Load Scenario	Reference Case	Low Load Scenario	DCPP Total	High Load Scenario	Reference Case	Low Load Scenario
Revenue Requirement ($M)	$1,661				$1,743			
Needed Generation *(GWh)*	16,300*	12,171	8,778	4,713	16,300*	11,201	8,139	4,312
Projected Market Sales Benefit *($M)*	$0	($226)	($422)	($668)	$0	($323)	($532)	($798)
Gross Need Unit Cost *($/MWh)*	$102	$136	$189	$352	$107	$156	$214	$404
Net Need Unit Cost *($/MWh)*	$102	$118	$141	$211	$107	$127	$149	$219

**Represents the total expected annual generation from Diablo Canyon based on the annual spring, two-month OTC mitigation outage schedule.*

[11] CGNP Opening Brief at p. 19, lines 3-12. PG&E's analysis included a reasonable forecast of future natural gas prices which was not challenged by any party in this proceeding. There is no basis in the record for finding, as CGNP speculates, that natural gas prices might increase significantly in the future.

[12] Ex. PG&E-1 at p. 2-22, line 23 to p. 2-23, line 10 (Frazier-Hampton).

[13] Ex. PG&E 1 (PG&E Direct Testimony) p. 2-22 (Frazier-Hampton)

CGNP's brief states that the predominant time of reduced daily need for Diablo Canyon's output is from 10:00 AM to 7:00 PM when solar power production is at its highest and market prices are strongly depressed.[14] There is no evidentiary basis for the notion that substantial, game-changing market revenues could be obtained from sales of Diablo Canyon's surplus energy in the wholesale markets. [15]

3. PG&E Has Reasonably Evaluated The Uncertain Post-2025 Costs Associated With Once Through Cooling Compliance

One of the key assumptions regarding the need for and cost-effectiveness of Diablo Canyon is the cost and scope of compliance with the SWRCB's OTC regulations. Under State Policy, Diablo Canyon is required to reduce its intake flow rate by at least 84% by 2025 (by installing cooling towers) unless the SWRCB decides that either the cost of compliance is wholly out of proportion with the cost estimate for cooling towers assumed at the time of adoption of the State Policy or compliance is wholly unreasonable based on engineering, space or permitting constraints, public safety considerations, or adverse environmental impacts. In such a case, the SWRCB can adopt an alternate compliance plan to mitigate the impacts of Diablo Canyon and any difference in impacts resulting from alternative, less stringent requirements must be fully mitigated.[16] While the SWRCB has taken steps to evaluate the technical feasibility of cooling towers and other compliance technologies and the associated implementation costs, it has not decided the issue. Therefore, as we stand today, it is uncertain whether cooling towers or some

[14] CGNP Opening Brief at p. 26, lines 3-10.

[15] CGNP also argues that "PG&E did not make aggressive use of Helms for arbitrage to store Diablo Canyon output during period of overgeneration." CGNP Opening Brief at p. 27, lines 12-13. Helms is a separate, standalone pumped-storage resource that PG&E did optimize for the CAISO system in its modelling of DCPP need, and it should not be considered for the specific benefit of minimizing overgeneration impacts on Diablo Canyon. Transcript Vol. 6 at pp. 943-44 (Frazier-Hampton)

[16] SWRCB, Statewide Water Quality Control Policy on the Use of Coastal And Estuarine Waters for Power Plant Cooling, (May 4, 2010, adopted by SWRCB Resolution No. 2010-0020, (Apr. 7, 2015). https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/appendix_a.pdf https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2010/rs2010_0020.pdf

other mitigation scheme would be required if Diablo Canyon were to operate beyond 2025 and how much this would cost.

CGNP argues that since PG&E has stated that it would close Diablo Canyon in 2025 rather than incur the $13 billion in costs associated with freshwater cooling towers, the probability of occurrence is zero and PG&E should "exclude this huge cost in the estimate of actual costs since PG&E would never pay it."[17]

The cost of OTC compliance is a significant component of PG&E's forecast of post-2025 costs at DCPP. PG&E accounted for this planning uncertainty when considering whether to retire Diablo Canyon by using a probabilistic cost for OTC compliance based on five OTC mitigation options.[18] Under this analysis, PG&E assigned a 10% probability to installing freshwater cooling towers costing $13.3 billion, a 15% probability to installing saltwater cooling towers costing $6.3 billion, a 50% probability to alternate mitigation measures costing $1 billion, a 15% probability to alternate mitigation measures costing $500 million and a 10% probability to alternate mitigation measures costing $180 million.[19] The costs of these options were assumed to be spread over the twenty years of the license renewal period.

While PG&E agreed in a TURN data request that incurring the $13.3 billion cost of freshwater cooling towers would likely make DCPP uneconomic[20], it is important to point out that PG&E only assigned a 10% probability to that potential outcome. In fact, PG&E assigned a 75% probability to the outcomes that assumed some form of alternative mitigation would be required rather than cooling towers. It would not be reasonable, as CGNP suggests, to just assume away the most negative inputs to Diablo Canyon's economics in a need assessment, even if it is a low probability event. The OTC compliance costs that would apply if DCPP were to be

[17] CGNP Opening Brief at p. 21, lines 3-10.

[18] Ex. PG&E 5-1, at p. 1-7, lines 6-24 (Frazier-Hampton).

[19] Ex, PG&E-2, at WP 2-28 (Frazier-Hampton)

[20] Ex. TURN-1, Attachment 2, PG&E Response to TURN 007-Q07, Answers (b) and (c). (Marcus).

relicensed for another 20 years of post-2025 operations are one of the most critical and significant uncertainties facing the plant today. It would have been unreasonable and imprudent for PG&E to assume away potential adverse OTC outcomes as suggested by CGNP, and continued with license renewal with a plan to just simply cancel the project (with very little time to plan for replacement resources) if the SWRCB decided to require the installation of cooling towers. PG&E reasonably considered the significant uncertainty over post-2025 OTC compliance requirements for DCPP and prudently factored the potential outcomes into the decision making to retire Diablo Canyon.

B. Early Shut Down of Diablo Canyon Is Unwarranted, Imprudent And Would Derail The Orderly Transition To GHG-Free Replacement.

SLOMFP and WEM ask the Commission to order PG&E to shut-down Diablo Canyon in 2019/2020—less than two years from now—because they are worried there could be a failure or event at the plant that might lead to an extended outage or shut-down. It would be irresponsible, based on mere speculation, to shut down the State's largest GHG-free resource, strand over one billion dollars in investment, and plunge California into a GHG-free replacement power crisis.

First, WEM erroneously asserts in its Opening Brief that Diablo Canyon is not needed and should be shut down in 2019/2020.[21] Other than a 2017 snapshot in PG&E's testimony which shows a clear need for all of Diablo Canyon's output for PG&E's bundled customers,[22] there is no evidence in the record regarding the need for Diablo Canyon in the remaining years of current operations. WEM generally challenges some of the load and resource assumptions in 2025 and 2030 and but this has no bearing on the need for the facility in 2019 or 2020. There is no evidentiary basis to support a finding that Diablo Canyon is not needed in 2019/2020.[23]

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[21] WEM Opening Brief at pp. 8-12.

[22] See, Ex. PG&E-1, at p. 2-13, Table 2-3 (Frazier-Hampton).

[23] In its Reply Brief, WEM refers (for the first time) to data allegedly from PG&E's IEPR forecast submitted after the close of the evidentiary record. (WEM Reply Brief, pp. 2-6) This portion of WEM's should be disregarded since it is based on evidence that is not in the record.

As addressed on pages 20 to 23 of its Opening Brief, the seismic and technical concerns raised by SLOMFP and WEM have been reviewed and addressed by PG&E and in most cases the NRC and none have proven to be a threat to safe and reliable operations, in particular for the remaining seven to eight years under the current NRC licenses. Moreover, all of these concerns pertain to nuclear safety and operations, subject to the exclusive jurisdiction of the NRC.

On the first day of hearings, the Administrative Law Judge Allen made the following ruling:

> This Commission's jurisdiction over PG&E's, the non-nuclear safety aspects of Diablo Canyon is clear. This Commission's jurisdiction over the nuclear safety aspects of Diablo Canyon is, well, let's just say it's less clear. So I do not want to have a lot of cross-examination on nuclear safety issues, because I can tell you that the proposed decision in this case will not be based on nuclear safety issues. That's not going to be a basis for any decision in this case, in part because I don't particularly want to go there and it hasn't really been a central issue in this proceeding. [24]

The central issue in this proceeding is whether it is reasonable and prudent for PG&E to retire Diablo Canyon in 2024/2025 at the expiration of its NRC operating licenses. This is a natural decision point for resource planning as state and federal approvals are required for continued operations. By the end of 2024/2025, Diablo Canyon will have completed forty years of operations and served out its expected operating life. With its mission of providing safe, reliable, GHG-free power complete, customers will have received the benefit of their bargain and closure of the plant will not result in customer hardship or the stranding of investment. Under the Joint Proposal and the associated settlements, by 2024/2025, the orderly transition to GHG-free replacement power will be complete and the Community and employees will have had time to prepare for the transition.

Shutting Diablo Canyon down in 2019 and 2020, conversely, would cause substantial harm to the environment, to customers, to the community and to the employees at the plant. The

[24] Transcript Vol. 2 at p. 187, lines 7-24.

environment would be harmed by the inevitable increase in GHGs as fossil power plants would be required to ramp up to replace much of Diablo Canyon's 18,000 GWh of annual energy production. Two years is not enough time to plan, solicit, approve and develop a significant portfolio of new resources. And the quantity of replacement resources required in 2019 and 2020 would be much higher given that California's SB 350 energy policies targeting a 50% RPS and doubling of Energy Efficiency will not be achieved until 2030. Shutting Diablo Canyon in 2019/2020 eviscerates the planned eight year transition period for development of replacement resources and would force hasty processes and decisions on replacement resources.

In two years, Diablo Canyon will still have over one billion dollars in rate base on the books. Since there is no demonstrated safety or reliability reason for early shut-down,[25] customers would presumably bear the costs of the stranded investment in the plant on top of the costs of replacement power. The County of San Luis Obispo and the associated cities have explained the hardship and adverse impact associated with plant shut-down in 2024/2025, which is addressed through the Community Impact Mitigation Proposal.[26] Shut down of Diablo Canyon in two years would accelerate the adverse impacts on the Community. Likewise, thousands of workers at Diablo Canyon would lose their jobs with very short notice.

Given the substantial and material impacts associated with premature shut-down of Diablo Canyon, the lack of evidence of a legitimate safety or reliability issue that would warrant early shut-down of Diablo Canyon and the Commission's lack of legal jurisdiction to regulate nuclear safety and operating matters, WEM and SLOMFP's request to shut down Diablo Canyon in 2019/2020 must be rejected.

Alternatively, WEM and SLOMFP, ask the Commission to conduct "contingency planning" in the event Diablo Canyon experiences an extended outage or there is an early shut-

[25] See PG&E's Opening Brief at pp. 20-23.

[26] See County Opening Brief.

down.[27] These parties do not explain exactly what "contingency planning" they would have the Commission do at this time.

It makes no sense to open a new "contingency planning" proceeding to examine potential responses to a nuclear power plant outage in advance of any event, because, first, there may never be an event that requires a response,[28] and second, if there is an event at Diablo Canyon, the specific circumstances will significantly shape the nature of the response and the plan for procurement of replacement power. For example, the response to a nuclear facility that will be out of service for one month in the early spring to conduct minor repairs will be very different than the response to a significant equipment failure causing a one-year outage. Until you know the scope of the outage, it makes no sense to implement a plan for replacement generation.

The Commission already has a process in place to address extended outages of a utility plant. Under Public Utilities Code Section 455.5, a utility is required to report a prolonged forced outage of generation facilities lasting nine or more months and, in response to such notice, the Commission is required to open an investigation to evaluate, among other things, appropriate ratemaking adjustments.[29] This process ensures appropriate Commission action in the unlikely event of a prolonged outage of Diablo Canyon.

Moreover, there is no need to conduct Diablo Canyon "contingency planning" to address reliability issues. Under WECC Minimum Operating Reliability Criteria standards, at all times the CAISO is required to maintain operating reserves equal to, at a minimum, the largest single contingency. In the event of a prolonged unplanned outage at DCPP there is sufficient generating capacity available to the CAISO system.[30]

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[27] WEM Opening Brief at pp. 3-8; SLOMFP Opening Brief at pp. 15-17. CEERT also supports development of a contingency plan in the event of early shutdown or retirement "which is reasonably foreseeable for an "aging" nuclear facility." CEERT Opening Brief at p. 10.

[28] PG&E has operated Diablo Canyon safely and reliably for 30 years without a significant operating event. Ex. PG&E 5-1 at p. 1-18, line 18 to p. 1-19, line 8 (Strickland).

[29] Cal. Pub. Util. Code §§ 455.5(b), (c).

[30] Ex. PG&E 5-1 at p. 1-19, lines 1-8 (Strauss).

SLOMFP also suggests that "contingency planning" could be done in the SB 968 Commission proceeding to evaluate community impacts from early closure of Diablo Canyon. SLOMFP asks that PG&E be directed to "conduct an assessment of environmental costs and benefits, and safety and reliability risks, directly or indirectly resulting from a permanent shut down of Diablo Canyon unit 1 and unit 2 in 2019/2020 respectively."[31] The NRC has exclusive legal jurisdiction over nuclear safety and operating issues.[32] There is no point in opening a CPUC proceeding to evaluate nuclear safety, operating or radiological risks that the Commission does not have the expertise or legal authority to evaluate.

As a final matter, CEERT argues that PG&E should be compelled to proceed with Tranche #2 procurement of 2000 GWh of GHG-free energy , in addition Tranche #1, as a reasonable contingency for early shut-down of Diablo Canyon.[33] The Tranche #2 procurement, as originally envisioned by the Joint Parties, was proposed to be operational over the period 2025 to 2030, which would not help mitigate the risk of early shut-down of Diablo Canyon.

III. PROPOSED REPLACEMENT PROCUREMENT (ISSUE 2.2)

A. Tranche #1 Should Be Approved

1. The Commission Should Authorize Tranche #1 Based on Demonstrated Need to Take Action to Replace a Portion of Diablo Canyon's Output with 2,000 Gross GWh of Energy Efficiency

Some parties claim that the Commission need not authorize PG&E's Tranche #1 proposal because it is not clear that additional GHG-free resources or energy efficiency will be needed upon retirement of DCPP. CCSF asserts that PG&E's service area may not need the 2,000 GWh of energy efficiency proposed in Tranche #1 due to an abundance of renewables under contract.[34]

[31] SLOMFP Opening Brief at p. 17.

[32] See PG&E Opening Brief at p, 21, footnote 67.

[33] CEERT Opening Brief at pp. 13-16.

[34] CCSF Opening Brief at pp. 4-14.

EPUC takes a similar viewpoint that there is no need to authorize Tranche #1 as early action to replace DCPP's GHG-free generation is not needed.[35]

By contrast, a number of parties share PG&E's view that the Commission should authorize Tranche #1 in this proceeding, to ensure that some additional GHG-free resources are procured and in place prior to the retirement of DCPP. NRDC argues that "the 2,000 gross GWh that would be obtained from Tranche # 1 is a modest fraction of the total procurement that will be needed to fully replace the output of Diablo Canyon. In this regard, Tranche #1 can be seen as a very modest down payment on the full amount of GHG-free resources that will need to be procured."[36] CEERT also supports Tranche #1 and agrees that early action is necessary and appropriate, that there is a sufficient record in this proceeding to approve PG&E's Tranche #1 proposal, and that it should not be deferred to the IRP.[37] Future Grid Coalition ("FGC") urges the Commission to take action in this proceeding to direct PG&E to buy energy savings as replacement of a small portion of the GHG-free energy currently produced by DCPP.[38]

PG&E has submitted substantial evidence demonstrating that it will need at least 2,000 GWh of additional GHG-free energy when Diablo retires, and therefore Tranche #1 can be approved based on the record in this proceeding.[39] Diablo Canyon currently produces approximately 18,000 GWh of GHG-free energy annually.[40] Table 2-3 of PG&E's Opening Testimony demonstrates that by 2025 and 2030, about 50% of DCPP's energy output is needed, an estimate that far exceeds the Tranche # 1 target.[41] In the Low Load scenario the need for

[35] EPUC Opening Brief at pp. 4-5.

[36] NRDC Opening Brief at p. 5.

[37] CEERT Opening Brief at pp 7-9.

[38] FGC Opening Brief at p. 2

[39] Ex. PG&E 5-1, p. 2-17, line 24 to p. 2-18, line 30 (Strauss).

[40] Ex. PG&E 1, p. 2-8, line 27 to p. 2-9, line 2 (Frazier-Hampton).

[41] PG&E has assumed that DCPP's generation would decline from 18,000 GWh of production in 2017 to 16,300 GWh in 2025 due to the assumed implementation of a 21 month refueling cycle as part of OTC mitigation that could be imposed by the SWRCB as well as CAISO system overgeneration mitigation. *See* Ex. PG&E-1 at p. 2-16, lines 1-12 (Frazier-Hampton).

DCPP drops to 26% of the plant's output (4,312 GWh) and increases to 69% of Diablo Canyon's output (11,201 GWh) in the High Load scenario. PG&E witness Todd Strauss demonstrated that Tranche # 1 would only replace approximately 13% of Diablo Canyon's anticipated annual output:

> Historically, DCPP's annual output has been approximately 18,000 GWh. DCPP's annual output is projected to decline to approximately 16,300 GWh, if DCPP were to have its operating licenses renewed and DCPP continued to operate after 2025. In comparison, Tranche #1 is targeted to provide 2,000 gross GWh of annual energy savings by 2025, or approximately 2,100 GWh of generation-equivalent energy when transmission and distribution line losses are considered. Thus, Tranche #1 is projected to provide an amount of EE to replace approximately 13 percent of DCPP's annual output when DCPP retires in 2025.[42]

While remaining replacement that will be needed in order to help achieve California's GHG emissions reduction target due to DCPP's retirement can be addressed in the IRP proceeding, there is no evidence that replacing 13% of DCPP's output would result in over-procurement, or that this initial amount of replacement (*i.e.*, 13%) is unnecessary. As PG&E witness Janice Frazier-Hampton testified regarding the amount of DCPP generation that would be needed in 2025 (and 2030), "the amount of generation used by PG&E's bundled customers is about 50 percent."[43] This amount far exceeds the 2,000 GWh of Tranche #1 energy efficiency that PG&E is proposing to procure for its service area.

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[42] Ex. PG&E 5-1 at p. 2-17 line 26 to p. 2-18 line 7 (Strauss).

[43] Tr. at p. 386, lines 1 to3 (PG&E, Frazier Hampton).

2. The Commission Should Approve the Tranche #1 Target Supported by the Joint Parties of Obtaining 2,000 Gross GWh of Energy Efficiency

a. The Commission Should Retain The Tranche # 1 Gross Savings Target

Several parties fault the Joint Parties for establishing the Tranche #1 target based on gross rather than net goals.[44] As noted in PG&E's rebuttal testimony, gross goals were in place when the Joint Proposal was being negotiated and remain in place today for the Energy Efficiency Portfolio.[45] PG&E noted in its rebuttal testimony that a compliance requirement based on net savings introduces uncertainty and increases costs. Net savings assessments can take years to produce, resulting in bid completion uncertainty.[46] PG&E might also need to procure more than the target to account for the risk that net savings assessments are lower than anticipated and bidders would have to build a risk premium into project pricing, raising overall costs.[47] Lastly, any remaining unspent funds are likely to be returned later in a net savings scenario, as PG&E would need to wait for net savings assessments to be completed and address any resulting shortfalls in meeting the savings goal, which could require new projects to meet any shortfall and then new net savings assessments of these new projects, effectively starting the cycle over again.

In response to parties' concerns about gross savings measurement, PG&E indicated that it will report an estimated net ratio for the savings when it submits its contracts for approval.[48] PG&E will also commit to provide an estimate of net savings in its annual reports to the CPUC on the progress toward meeting the 2,000 gross GWh target. This would enable parties to consider savings from Tranche #1 on both an estimated net and reported gross basis. This is a reasonable compromise that will provide information desired by parties while not obviating the

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[44] Joint Opponents Opening Brief at p. 8; TURN Opening Brief at pp. 23-25.

[45] Ex. PG&E-5-1 at p. 2-50, lines 27-29, and p. 2-51, lines 1-2 (Berman).

[46] Ex. PG&E-5-1 at p. 2-51, lines 17-19 (Berman).

[47] Ex. PG&E-5-1 at p. 2-51, lines 20-23 (Berman).

[48] Ex. PG&E-5-1 at p. 2-51, lines 11-14 (Berman).

gross target supported by the Joint Parties nor increasing costs associated with bid completion uncertainty and procurement in excess of the target to address net assessment risk.

b. Tranche 1 Should Be Limited To Energy Efficiency Resources

TURN argues that if Tranche #1 is approved outside the Energy Efficiency Business Plan "ratepayers would be better served through an all-source, GHG-free solicitation, rather than an EE-only solicitation."[49] The Joint Parties have proposed Tranche #1 as a first step in DCPP replacement and it is consistent with the Energy Action Plan Loading Order and statutory mandates for the IOUs to first seek to cost-effective, reliable and feasible energy efficiency to meet unmet load before procuring generation resources.[50] As FGC states, "Shuttering Diablo without simultaneously procuring other carbon-free replacement capacity . . . would be a huge mistake."[51] The Tranche #1 proposal should be authorized to seek energy efficiency resources first, and the remaining need for other resources to replace the GHG-free energy from DCPP should be reviewed and authorized as part of the Commission's IRP proceeding.[52] As PG&E has noted, energy efficiency requires a long lead time after program inception to engage customers to commit to energy efficiency projects as they make building and facility upgrade decisions. Therefore, having energy efficiency play a meaningful role in replacing a large asset like DCPP takes many years of on the ground implementation.[53] PG&E agrees with parties who indicate that renewables, demand response and storage may each be helpful going forward[54] and PG&E recommends that the ability of these resources to be part of the solution should be explored in the IRP.

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[49] TURN Opening Brief at p. 20.

[50] Cal. Pub. Util. Code § 454.5(b)(9)(C)(i) ("The electrical corporation will first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.").

[51] FGC Opening Brief at p. 1.

[52] Ex. PG&E-5-1 at pp. 2-21 lines 18 to 28 (Strauss).

[53] Ex. PG&E-5-1 at pp. 2-31 lines 1 to 23 (Berman).

[54] EDF Opening Brief at pp. 3-6; Joint Opponents' Opening Brief at pp. 7-8.

Some parties specifically recommend inclusion of demand response and/or energy storage in Tranche #1.[55] As PG&E witness Todd Strauss testified, Tranche #1 seeks energy savings (GWh), which is not typically provided by demand response resources:

> Demand response has historically been designed to reduce usage at peak, as measured in units of peak demand or capacity (kilowatt). More generally, demand response shifts usage among different hours. Demand response produces little or no net energy savings (kilowatt-hour (kWh)), and may possibly even increase net energy consumption. In contrast, the target of Tranche #1 is energy (GWh).[56]

Similarly, while PG&E agrees with intervenors who suggest that energy storage may be useful after Diablo Canyon closes to help integrate renewables[57], PG&E explains that, on a net basis, energy storage resources consume energy rather than save energy. For this reason, energy storage was not included in Tranche #1, which seeks energy savings (GWh).[58]

The question of demand response, energy storage, or other GHG-free resources should be reviewed in the IRP, where the remainder of PG&E's and other LSE's resource needs will be analyzed.

Consistent with California's Loading Order, the Commission should not expand Tranche #1 to include resources other than energy efficiency.

3. PG&E's Proposed Criteria for Obtaining 2,000 Gross GWh in Tranche #1 are Reasonable.

Some parties take issue with specific criteria or requirements of PG&E proposed Tranche #1 process for procuring 2,000 gross GWh of energy efficiency via solicitations or addition of utility programs. Specifically, some parties disagree with PG&E's proposed cost-effectiveness criteria for screening offers for eligibility, or disagree with PG&E's proposal for ranking offers

[55] Joint Opponents Opening Brief at p. 7.

[56] Ex. PG&E 5-1, p. 2-20, lines 13-18 (Strauss).

[57] EDF Opening Brief, pp. 3-4.

[58] Ex. PG&E-5-1 at pp. 2-20 line 22 to p. 2-21, line 4 (Strauss).

in a solicitation based on comparison of time-differentiated avoided cost to offer price. Some parties object to PG&E's savings persistence criteria. PG&E's proposals with regard to these criteria are reasonable approaches to acquiring additional energy efficiency to fulfill the Tranche #1 target, and should be authorized by the Commission.

a. PG&E's Cost-Effectiveness Proposal is Reasonable

Multiple parties assert that the Total Resource Cost ("TRC") and Program Administrator Cost ("PAC") Tests should be used to determine the cost-effectiveness of any Tranche #1 offers.[59] PG&E proposes to screen offers for eligibility using a cap based on RPS resources[60], and to rank offers using a PAC test[61] that includes time-differentiated avoided costs.[62]

Some parties question PG&E's proposed use of the RPS cap as a criterion to screen offers for eligibility.[63] PG&E shows that the RPS cap is an appropriate limit on the cost/kwh of energy efficiency in Tranche #1 because PG&E is seeking to replace the output of Diablo Canyon with GHG-free resources.[64] PG&E notes that TURN states in its Opening Brief its strong agreement with the Joint Parties' proposal to replace the output of Diablo Canyon with GHG-free resources.[65] RPS resources are likely to be somewhat more expensive than GHG-emitting resources, such as natural gas-fired generation. Hence, as the Joint Parties seek to replace DCPP with GHG-free resources, not GHG-emitting resources, it is appropriate to use a cap on the bid price measured by a proxy cost of RPS resources rather than the mix of GHG-free and GHG-emitting resources. The E3 calculator, which is used to evaluate the energy efficiency program

[59] ORA Opening Brief at p. 13; EPUC Opening Brief at p. 9; Joint Opponents' Opening Brief at pp. 8-9, and CCSF Opening Brief at p. 21.

[60] Ex. PG&E-5-1 at pp. 2-46 lines 8 to 11 (Berman).

[61] Ex. PG&E-5-1 at pp. 2-49 lines 1 to 14 (Berman).

[62] Ex. PG&E-5-1 at p. 2-35, lines 10-11 (Berman).

[63] Joint Opponents' Opening Brief at p. 8; CCSF Opening Brief at pp. 29-30.

[64] Tr. at p. 234, lines 16 to19 (PG&E, Frazier Hampton).

[65] TURN Opening Brief at p. 14.

and produce the TRC and PAC results, contains prices that represent a mix of market resources, including gas-fired generation.[66] This would be an inappropriate benchmark in the context of determining the eligibility of GHG-free resources to replace DCPP's GHG-free energy, as it would reject GHG-free offers on the basis that they cost more than a blend of GHG-free and GHG-emitting resources.

PG&E has also responded to the concerns expressed by parties regarding the use of the PAC test for evaluating and ranking offers. Witness Jan Berman explains in rebuttal that the using the PAC test in a competitive solicitation will minimize procurement costs.

> Consider two hypothetical bidders with program proposals containing an identical mix of measures. The TRC test would not differentiate the bids on the basis of total bid price, perhaps encouraging unnecessarily high incentive payments. The PAC test, by contrast, would result in an appropriately higher bid ranking for the lower price offer.[67]

PG&E notes that the Commission has approved the use of the PAC test for procurement purposes in the context of SCE's all-source RFO for replacement resources due to the retirement of once-through cooling plants and SONGs.[68] ORA agrees with PG&E that "the use of the PAC metric for comparison of individual bids against one another may be appropriate for use in specific utility solicitations."[69]

In order that interested parties may have access to desired TRC and PAC information, PG&E has agreed that when PG&E submits winning bids (or utility programs) to the Commission for approval, PG&E will include TRC and PAC test results and will use the avoided cost calculator in place at the time of the advice letter filing.[70] Parties will have access

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[66] Energy and Environmental Economics, Inc. ("E3"), Avoided Costs 2016 Interim Update, August 1, 2016, figure 7, p. 17.

[67] Ex. PG&E-5-1 at p. 2-49, lines 16-21 (Berman).

[68] Ex. PG&E-5-1 at p. 2-49, lines 22-26 (Berman).

[69] Ex. ORA-4 at p. 14, lines 3–5 (Buch).

[70] Ex. PG&E-5-1 at p. 2-50, lines 5-7 (Berman).

to this information when they are reviewing and commenting on PG&E's advice letter. The Commission should not adopt a requirement here that the winning bids be cost-effective on a standalone basis under the TRC or PAC tests, as some parties urge[71], as there is no requirement for a subprogram to be cost-effective on a standalone basis under the TRC or PAC test in the current energy efficiency portfolio.[72] Such a requirement would create an undue burden on Tranche #1 offers not imposed on other energy efficiency offerings.

b. PG&E's Proposal on Savings Persistence is Reasonable

Some parties assert that PG&E's proposal for bidders to provide information showing that projects are expected to persist for at least five years is insufficient because measures installed years before Diablo Canyon retires may not be producing savings when the plant closes.[73] These parties have proposed minimum savings persistence periods of more than five years.[74] These proposals are unnecessary to ensure a robust portfolio of projects, will limit available potential, and should be rejected.

Energy Efficiency projects often include a mix of short-lived and long-lived measures. As PG&E witness Jan Berman testified, PG&E's proposal that bidders provide information showing that projects are expected to persist for at least five years strikes a reasonable balance between seeking long-lived measures and encouraging some short-lived measures to be simultaneously installed to capture all the savings on site.[75] PG&E believes it is reasonable to anticipate that the average expected useful life ("EUL") resulting from the bids could approximate PG&E's third-party portfolio average EUL, which averaged 11.46 years in 2015,

[71] ORA Opening Brief at pp. 13-15.

[72] CPUC, Energy Efficiency Policy Manual, Ver. 5, July 2013, p. 18 ("The energy efficiency portfolio as a whole must pass both the TRC and PAC tests to be eligible for funding.").

[73] CCSF Opening Brief at p. 5; see also TURN Opening Brief at p. 27; Joint Opponents Opening Brief at pp. 12-13.

[74] CLECA Testimony at p. 24 (Barkovich).

[75] Ex. PG&E-5-1 at p. 2-41, lines 16-18 (Berman).

including savings from the commercial, industrial, agricultural and residential sectors.[76] This EUL resulted from administering a portfolio with no requirement for a minimum EUL. In addition to requiring bidders to provide information showing that projects are expected to persist for at least five years, PG&E plans to include EUL in the RFO criteria, resulting in bids with longer EULs being ranked more highly that those with shorter EULs.[77]

It is also worth noting that markets change and that, at the end of an EUL, technology changes or new codes and standards make it more likely that the energy savings will persist rather than be replaced by outdated, inefficient equipment. As PG&E witness Jan Berman explained:

> It is important to note that the EUL effectively represents the time frame over which the utility can claim as having enabled savings, not the total persistence of the savings. Generally speaking, when equipment reaches the end of its "useful life", customers may: (1) continue to use it; or (2) replace it with equipment of a comparable or better efficiency. When customers replace equipment: (1) the savings may shift from "program" savings to "codes and standards" savings if newer codes and standards now require equipment at this level of efficiency; and (2) the installation of new fixtures during the original EE project (e.g., Light-Emitting Diode (LED) lighting compatible fixtures) result in replacement of the original technology with similar or better technology (e.g., LED lights). In any of these cases, energy use is unlikely to increase when the original replacement reaches the EUL, although the utility program is no longer credited with the savings. Hence, this early action to increase EE should result in savings that are embedded prior to 2024, and then persist.[78]

TURN argues that the Commission has yet to revisit an interim policy of assuming that 50% of savings decay or revert to prior efficiency levels after reaching the measure EUL.[79] This is not accurate. In D.12-05-015, which was adopted after D.09-09-049, the basis for TURN's

[76] Ex. PG&E-5-1 at p. 2-41, lines 22-25 (Berman).

[77] Ex. PG&E-5-1 at p. 2-44, lines 2-3 (Berman).

[78] Ex. PG&E-5-1 at p. 2-42, lines 1-15 (Berman).

[79] TURN Opening Brief at p. 29.

reference for the 50% assumption, the Commission noted:

> [B]ased on many comments on the treatment of decay in the cumulative goals provided in the proposed decision, it is evident that there are many challenges associated with accounting for decay that must be addressed prior to including it in utility goals in a meaningful and robust manner. ¶ We therefore will adopt only annual goals for the 2013-2014 transition portfolio, with the intention of developing a better understanding of the sustained impact of the utility programs (including decay and market transformative effects) . . . .[80]

Decision 12-05-015 recognized the challenges associated with estimating savings persistence after the EUL, and removed this calculation from energy efficiency goals.

The proposals by other parties to require projects to demonstrate ten or more years of EUL will result in a number of unintended consequences. These include:

1. Reduced available savings, as measures with shorter EULs would be excluded even if they are part of a project with a longer EUL.
2. More challenging customer acquisition, as customers with a project that involves a mix of shorter and longer EUL measures may be less likely to participate if only their longer-lived measures are eligible.

These proposals would make it less likely that PG&E can meet the 2,000 GWh target and are unnecessary as PG&E has outlined above.[81/] These proposals should be rejected.

4. PG&E's EM&V Proposal Is Appropriate

FGC expresses concern that EM&V methods are not pre-specified and that implementers would review their own accomplishments. PG&E noted in rebuttal testimony that the intention to request bidders to specify an appropriate EM&V technique up front is to ensure an appropriate match between program design and EM&V technique at the time of selection and contracting,

[80] D.12-05-015, p. 95.

[81] Ex. PG&E-5-1 at p. 2-42, lines 16-25 (Berman).

not to allow implementers to review their own accomplishments.[82] PG&E proposed to utilize a consultant to verify contract savings[83] and the CPUC would still conduct their own EM&V.[84]

FGC proposes to resolve its concerns by significantly narrowing the focus of the proposed solicitation to commercial, pay-for-performance arrangements. Though FGC characterizes this approach as "new", the idea appears to be consistent with the language of AB802, passed in 2015. While PG&E anticipates that such types of programs may well participate in the solicitation, PG&E disagrees with the premise that significantly narrowing solicitation eligibility to one type of customer and EE method will produce more robust results than a more open EE solicitation.[85]

While FGC urges the Commission not to delay action on energy efficiency, it also proposes that prior to PG&E selecting any new EE projects or programs, the Commission create a "Diablo Energy Efficiency Prize" to develop automated, open-source meter-based savings tools pursuant to a specification developed by Commission-retained experts for the commercial building sector. FGC proposes an 18-month schedule. PG&E recommends the more expedient and expeditious approach of authorizing the solicitation to commence after the decision in this proceeding.

5. The Commission Should Not Base Its Decision Whether To Authorize Tranche #1 on Parties' Speculation Regarding the Solicitation Results.

Several parties argue that the Tranche #1 proposal should be denied because PG&E has not provided sufficient evidence that the solicitations will be successful. They assert arguments based on assumptions about the bid results including: (a) there will be insufficient feasible, cost-effective offers to fulfill the Tranche #1 target; (b) the resulting energy efficiency will worsen

[82] Ex. PG&E-5-1 at p. 2-53, lines 4-12 (Berman).

[83] Ex. PG&E 1 at p. 4-7, lines 20-22 (Berman).

[84] Ex. PG&E-5-1 at p. 2-53, lines 11-12 (Berman)

[85] Ex. PG&E-5-1 at p. 2-55, lines 5-9 (Berman).

overgeneration. As discussed below, these arguments largely rest on speculation regarding the solicitation results and are an insufficient basis to deny PG&E's Tranche #1 proposal.

a. Concerns About Feasibility do not Justify Rejection or Reduction of the Tranche #1 Proposal

Parties argue that the amount of savings PG&E seeks in Tranche #1 is infeasible, and therefore the entire request should be denied.[86/] ORA and EPUC assert that winning bids cannot be cost-effective because the Energy Efficiency Potential Study identifies all cost-effective energy efficiency and PG&E's proposed Tranche #1 would seek amounts above the cost-effective energy efficiency identified in the Potential Study.[87] PG&E does not ascribe the same level of precision to the Potential Study, nor view the Potential Study as defining an absolute limit on the amount of cost-effective energy efficiency savings available in a specified time period. As PG&E noted in its rebuttal testimony, it has often exceeded the Commission's goals derived from the Potential Study.[88] The Potential Study is not a hard cap on the amount of cost-effective energy efficiency in PG&E's service area. As PG&E demonstrated, different vintages of the Potential Study can identify very different potential savings levels.[89] In fact, the Potential Study also includes an "economic potential" scenario, which is greater than the market potential and is the estimate of the total amount of cost-effective potential in a service territory. The market potential is a subset of this economic potential that is deemed to be achievable.[90] Finally, according to NRDC, the Potential Study is "a constrained estimate of achievable savings that has been calibrated downward to match the program savings in recent years. As such, it does not represent an estimate of the full amount of cost-effective savings that is likely to be available."[91]

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[86] Joint Opponents' Opening Brief at p. 10; ORA Opening Brief at p. 12; TURN Opening Brief at p. 22.

[87] ORA Opening Brief at pp. 9-11; EPUC Opening Brief at p. 6.

[88] Ex. PG&E-5-1 at p. 2-47, lines 13-15 (Berman).

[89] Ex. PG&E-5-1 at p. 2-47, line 7 to p. 2-48, line 16 (Berman).

[90] D.15-10-028, Appendix 2, Figure ES-1.

[91] NRDC Opening Brief at p. 6.

Rather than assume that there would not be additional, cost-effective energy efficiency available if Tranche #1 were approved, the Commission should authorize PG&E to hold the solicitations to let the market reveal the availability of energy efficiency resources.

EPUC essentially argues that achievement of the Tranche #1 target is impossible because: "After the EE Business Plan Procures All Market Potential, There Can Be No Feasible, Cost-effective EE Remaining To Procure."[92] This line of argumentation presents a rather damning assessment of the likelihood of California achieving the SB 350 doubling goals, if current savings levels identified in the Potential Study are all the savings that is available. However, assuming *arguendo*, the parties' arguments that the Tranche #1 goal is infeasible are correct, and PG&E is unable to obtain the entire amount of its Tranche # 1 goal, after three solicitations PG&E will return uncommitted and unspent funds to customers, with interest.[93] None of the parties can say with any certainty, in advance of the solicitations, how much energy efficiency PG&E would obtain.

Joint Opponents argue, in the alternative, that the amount of savings sought in Tranche #1 should be reduced by half.[94] FGC argues that Tranche #1 should be limited to existing commercial buildings using a to-be-developed, pre-approved automated savings measurement and verification approach.[95] These proposals to reduce the scope of potential savings should be denied. Instead PG&E should be allowed to attempt to seek 2,000 gross GWh from all customer classes and market segments, with the understanding that uncommitted and unspent funds will be returned with interest whether the target is met or not.[96]

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[92] EPUC Opening Brief at p. 6.

[93] Ex. PG&E-5-1 at p. 2-40, lines 18-27 (Berman).

[94] Joint Opponents' Opening Brief at p. 14-15.

[95] FGC Opening Brief at p. 2.

[96] Ex. PG&E-5-1 at p. 2-41, lines 1-7 (Berman).

None of the parties' speculation about the solicitations' results merit denying PG&E's proposal to replace Diablo's output with an aggressive yet achievable amount of energy efficiency.

b. Tranche #1 Is Designed To Address Parties' Concerns About Overgeneration.

The Joint Opponents, CCSF, and EPUC raise concerns that Tranche #1 will exacerbate overgeneration conditions on the CAISO-controlled grid.[97] To support their claims, these parties primarily rely on PG&E's response to a TURN data request that asked PG&E to explain how limiting Tranche #1 to EE resources would mitigate the possibility of overgeneration.[98] However, this reliance is misplaced because these parties take PG&E's data request response out of context. Read in its entirety, TURN's request and PG&E's response address the issue of why limiting Tranche #1 to EE mitigates the risk of overgeneration when compared to the alternative of allowing supply-side resources, such as RPS-eligible generation, to participate in Tranche #1 through an all-source RFO. It is in the context of this question that PG&E explained that incremental EE would not reduce overgeneration "and would likely increase the frequency and magnitude of overgeneration."[99] However, PG&E's response did not examine the specifics of the Tranche #1 proposal for procuring EE. Rather, it simply explained generally that by limiting Tranche #1 to EE, as compared to conducting an all-source RFO, the potential to exacerbate overgeneration would be mitigated.

The Joint Opponents also rely on testimony by PG&E witnesses Steve Malnight and Todd Strauss that overgeneration is occurring today.[100] CCSF makes a similar argument,

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[97] Joint Opponents Opening Brief at pp. 4-8; EPUC Opening Brief at p. 11; CCSF Opening Brief at pp. 6-9.

[98] The actual data request, TURN Data Request Set #1, Question 7, was attached to CCSF's Testimony as Exhibit 5. PG&E's response is quoted in part in each of these parties' opening briefs. *See* EPUC Opening Brief at p. 11; CCSF Opening Brief at pp. 6-7; Joint Opponents Opening Brief at p. 5.

[99] Ex. CCSF-1, Ex. 5 at p. 5 (response to TURN Data Request Set #1, Q 7).

[100] Joint Opponents' Opening Brief at p. 4, n. 17.

quoting at length from a recent PG&E advice letter filing seeking Commission approval of an RPS contract amendment and arguing that overgeneration conditions exist today and should not be exacerbated.[101] While there is no dispute that overgeneration has and will continue to occur, with or without Tranche #1, the Joint Opponents and CCSF draw mistaken conclusions from these statements. As PG&E explained in a data request response to CLECA that was issued in December 2016, before intervenor testimony was due, and subsequently in its Rebuttal Testimony, PG&E intends to structure the Tranche #1 RFO in a manner that is intended to account for overgeneration conditions in bid evaluation of Tranche #1.[102] Specifically, PG&E is proposing to use time-differentiated avoided costs in scoring bids in the Tranche #1 solicitation. This approach will result in overgeneration hours receiving less value (or negative value) compared to hours in which overgeneration is not a concern.[103]

More fundamentally, if adopted, CCSF's and the Joint Opponent's arguments that because overgeneration exists today , incremental EE should not be procured, would require the Commission to immediately stop all incremental EE and GHG-free resource procurement. This is clearly not the Commission's policy. While overgeneration situations do exist today, this does not mean that the Commission should put future procurement of incremental EE and other GHG-free resources on hold. Instead, the right solution is to design programs and procurement that take overgeneration costs into account and seek to minimize overgeneration conditions – which is exactly what PG&E is proposing to do through the Tranche #1 solicitation process by using time-differentiated avoided costs.

CCSF argues that if overgeneration is one of the reasons to retire DCPP, Tranche #1 should not be approved because it may "exacerbate" overgeneration.[104] This argument is the

[101] CCSF Opening Brief at p. 8.

[102] *See* Ex. CCSF-1, Ex. 5 at p. 3 (response to CLECA Data Request Set #5, Q 5 dated Dec. 21, 2016); *see also* Ex. PG&E-5-1 at p. 2-35, lines 7-18 (Berman).

[103] Ex. PG&E-5-1 at p. 2-35, lines 11-13 (Berman).

[104] CCSF Opening Brief at pp. 6-7.

classic mix of apples and oranges. There is no dispute that DCPP has very limited flexibility and that it generally operates as baseload facility with the same output during all hours of the day.[105] On the other hand, EE proposals can be designed to focus on those measures that save energy during times when overgeneration is not a concern, and the design of the solicitation for Tranche #1 is designed to encourage such a focus, as explained above.

Finally, the Joint Opponents and CCSF assert that the time-differentiated avoided cost solicitation evaluation criteria proposed by PG&E is insufficient to address concerns that the addition of the Tranche #1 EE will contribute to increased overgeneration.[106] To support this argument, the Joint Opponents rely on several equivocal statements made by witnesses opposing Tranche #1. Specifically, the Joint Opponents rely on CCSF witness Kinosian who stated at the hearing that time-differentiated avoided costs might "not necessarily give you a result that directly reflects the overall impact of overgeneration and curtailment."[107] The Joint Opponents also rely on CLECA witness Barkovich who stated that "it is not clear" that there is enough cost-effective EE that will not exacerbate overgeneration.[108] However, these statements are mere speculation because PG&E has not yet conducted the Tranche #1 solicitation. When PG&E conducts the Tranche #1 solicitation, it will thoroughly review the winning bids with its PRG and will present the winning bids to the Commission for approval through an advice letter. The Commission should not, however, simply reject Tranche #1 because the time-differentiated avoided cost evaluation cannot entirely eliminate the possibility of overgeneration.

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[105] Ex. PG&E-5-1 at p. 1-5, line 10 to p. 1-6, line 8 (Strickland).

[106] Joint Opponents Opening Brief at p. 6; CCSF Opening Brief at pp. 8-9.

[107] Joint Opponents Opening Brief at p. 6.

[108] *Ibid*.

6. The Savings Should Count Towards The Shareholder Incentive Mechanism.

ORA's opening brief continues it long-standing objection to shareholder incentives for energy efficiency achievements. ORA opposes PG&E's request for savings achieved from the solicitations to be included in the calculation of PG&E's annual shareholder incentive award.[109] First, it argues that the incentive should not be available because the winning bids are unlikely to be cost effective.[110] While, as noted by ORA, PG&E is mandated to pursue a portfolio of cost-effective energy efficiency, the Energy Savings Performance Incentive ("ESPI") mechanism rewards the IOUs for all energy efficiency resource programs and does not contain any requirement that individual programs or subprograms or measures be cost effective.[111] PG&E receives a shareholder incentive for all resource programs PG&E implements or administers, including savings resulting from programs that were based on third-party solicitations.[112] The Commission did not carve out program PG&E administers that are not cost-effective, such as public sector programs, which the Commission has authorized although they are not cost effective.[113] The ESPI mechanism provides rewards for all savings in programs, not just cost-effective programs as ORA argues.[114]

ORA also reiterates its long-standing argument that the shareholder incentive should not be available because the amount of the incentive must be included in the cost-effectiveness analysis, and the added cost will make the results less cost-effective. They also argue that it should not be paid because it will render the solicitation less cost effective.[115] PG&E agrees that including these costs in a cost-effectiveness analysis is required to comply with Commission

[109] ORA Opening Brief at pp. 18-20.

[110] *Id.* at p. 19.

[111] See D. 13-09-023 at pp. 3, 31-33.

[112] Ex. PG&E 1 at p. 4-10, lines 28-31 (Berman).

[113] Ex. TURN-1 at p. 32, Table 1.11, which shows that the public sector is not cost-effective.

[114] ORA Opening Brief at p. 19-20.

[115] *Id.* at p. 19.

requirements, but this is insufficient reason to deny it. The Commission should not set a precedent in this proceeding that treats Tranche #1 energy efficiency procurement differently than all other energy efficiency programs which are eligible for a shareholder incentive through the EPSI mechanism.

7. Tranche #1 Does Not Reduce Opportunities For Community Choice Aggregators To Administer or Implement Energy Efficiency Funding.

CCSF erroneously argues that PG&E's Tranche #1 proposal does not adhere to the Public Utilities Code requirements to allow CCAs to apply to the Commission to administer some of nonbypassable charges collected by the IOUs pursuant to Public Utilities Code Section 381.1.[116] CCSF argues that PG&E "does not allow CCAs to elect to administer Tranche #1 energy efficiency funds collected from customers in their service area."[117] This represents a misunderstanding of the applicable statute. There are two means for a CCA to obtain Commission approval to administer public purpose program ("PPP") funds collected by a utility pursuant to Section 381.1. The Commission rather than the utility establishes a procedure to allow a CCA to apply or elect to administer part of those funds.[118] The CCA electing to administer the funds must apply directly to the Commission, who will approve or certify the plan if it meets the criteria established in the statute.[119] If the Commission approves PG&E's Tranche #1 proposal, the amount of funds that it collects pursuant to Section 381.1 increases. This does not, as CCSF appears to argue, *limit* a CCA's ability to request to administer PPP funds. If CCSF, or any other CCA would like to administer PPP funds and does not do so currently, it may seek approval through an application or advice letter filing.[120] If any CCA that administers such funds would like to seek an increase in the amount of funds it administers, it may do so

[116] CCSF Opening Brief at p. 20.

[117] CCSF Opening Brief at p. 20.

[118] Pub. Util. Code §§ 381.1 (a); 381.1 (e).

[119] Pub. Util. Code §§ 381.1 (a); 381.1 (f).

[120] D.14-01-033, OPs 1, 4.

through an application or advice letter filing as specified by the Commission. MCE is currently the only CCA in PG&E's service area who has requested to administer such funds; it has a pending application at the Commission to significantly increase the amount of energy efficiency funds that it administers.[121] PG&E's Tranche #1 proposal does not infringe upon or impede any CCA's ability to request to administer energy efficiency funds under Section 381.1.

PG&E has also indicated in its testimony that in addition to the CPUC-approved procedures for requesting administration of PPP funds, a CCA can also bid into PG&E's proposed Tranche #1 solicitations to obtain funding to implement an energy efficiency program if it desires to do so.[122] Thus, contrary to CCSF's representations, PG&E's proposal may *expand* rather than limit opportunities for a CCA to design and offer energy efficiency programs.

8. Tranche #1 Does Not Reduce Energy Efficiency Opportunities For Regional Energy Networks of Local Government Partnerships.

CCSF also criticizes PG&E for not creating a set-aside for Regional Energy Networks ("RENs") or local government partnerships ("LGPs") in its application.[123] Specifically, CCSF states that PG&E has failed "to provide effective opportunities for local governments and RENs to participate in Tranche #1."[124] CCSF again misstates the Commission's procedures for submission of a request for energy efficiency funding for RENs or LGPs.

The Commission established a protocol for any existing or new REN to follow to seek to administer energy efficiency funding.[125] The process established by the Commission allowed any REN to file a motion to seek funding for proposed energy efficiency programs. Several current or proposed RENs filed motions with the Commission on January 23, 2017, which was

[121] Marin Clean Energy Application, A.17-01-017 (Jan. 17, 2017).

[122] Tr. at p. 773, lines 13 to18 (PG&E, Berman).

[123] CCSF Opening Brief at pp. 22-24.

[124] CCSF Opening Brief at p. 24.

[125] Assigned Commissioner (AC) and ALJ's Ruling and Amended Scoping Memorandum (Regarding Phase III of R.13-11-005.), November 2, 2016, p. 12

five months after PG&E filed its application in this proceeding. Any existing or proposed REN had the opportunity at that time to make proposals to administer EE funds including proposals to increase energy efficiency offered by the REN. Further, CCSF overstates the role of RENs in administering PPP funding. The Commission authorized the formation of RENs as a pilot, in part, "to determine if local governments are in a position to plan and administer energy efficiency programs absent utility support and intervention."[126] The Commission observed at the outset, "It will be especially important, with the REN activities, to emphasize more evaluation to determine if certain piloted activities were successful and should be scaled up in 2015 and beyond, or discontinued altogether."[127] In D.14-10-046, the Commission confirmed that the REN energy efficiency offerings were pilots, and that prior to allowing RENs to become permanent program administrators, and/or expanding existing REN activities, REN pilots would need to be evaluated "to ensure they achieve their objectives."[128]

In 2016, the Commission concluded two studies of REN and CCA programs.[129] Based on public review and comment, the Commission found that the data on REN performance was insufficient to conclude whether RENs programs should be renewed, expanded, modified, or terminated.[130] The Commission concluded that additional evaluation of REN programs should be conducted[131] and offered no guarantee that existing or new RENs would continue to be

[126] D.12-11-015, p. 8 and OP 2.

[127] D.12-11-015, p. 20.

[128] D.14-10-046, p. 127.

[129] The Program Year 2013–2014 RENs Value and Effectiveness Study—Energy Division California Public Utilities Commission—Final, conducted by Opinion Dynamics Corporation, Final, January 5, 2016 (REN – CCA Value and Effectiveness Study); 2013-2014 Regional Energy Networks and Community Choice Aggregator Programs Impact Assessment—Final Report and Appendices—Prepared for the Energy Division of the California Public Utilities Commission by Itron, Inc., January 7, 2016 (REN-CCA Impact Assessment Report), both of which are attached as Exhibits A-B to the ALJ's Ruling Requesting Comments re Regional Energy Networks, R.13-11-005, January 12, 2016.

[130] D.16-08-019, p. 8.

[131] D.16-08-019, COL 1 and 2.

funded.[132] Additional review of REN pilots will occur in Phase 3 of the Commission's energy efficiency rulemaking, R.13-11-005.[133] These issues will determine whether and to what extent funding for RENs will continue. The future of RENs will be resolved in the EE proceedings rather than this proceeding. Although PG&E did not specify a particular, carved-out role for RENs in the context of the Tranche #1 proposal, neither did PG&E recommend any restriction on a REN's ability to bid in the solicitations if it meets the eligibility requirements.[134] Hence, PG&E's Tranche #1 solicitations provide expanded opportunity for interested RENs to design and offer energy efficiency programs.

CCSF also appears to generally fault PG&E for not carving out a fund or program for local government partnerships.[135] There is no requirement, and CCSF cites none, for PG&E to do so. Indeed, as other parties have pointed out in this proceeding, the Commission has instructed PG&E to increase the amount of solicitations it conducts for energy efficiency to increase competitive procurement, as PG&E has proposed here.[136] LGPs can elect to participate in PG&E's solicitations.[137]

9. The Commission Should Approve the Tranche 1 Proposal Outside of the Business Plan Proceeding.

TURN and ORA recommend that the Commission direct PG&E to update its EE Business Plan to incorporate the incremental EE PG&E proposed to capture through Tranche #1.[138] This request should be denied as it provides no customer benefits and would only serve to

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[132] D.16-08-019, p. 10.

[133] Assigned Commissioner (AC) and ALJ's Ruling and Amended Scoping Memorandum (Regarding Phase III of R.13-11-005), November 2, 2016, p. 10.

[134] Tr. at p. 773, lines 4 to 8 (PG&E, Berman).

[135] CCSF Opening Brief at p. 24.

[136] D.16-08-019, p 73. "Given our (CPUC) desire for increased emphasis on third-party program design, as well as a solicitation approach to portions of the portfolio where it makes sense."

[137] Tr. at p. 773, lines 13 to 15 (PG&E, Berman).

[138] TURN Opening Brief at pp. 36-39.

delay both PG&E's Business Plan Application and the resolution of PG&E's proposal in this proceeding. PG&E's Business Plan meets the requirements of the Guidance Decision in that it has a sector strategy for each customer segment, proposes statewide leads for each statewide program, commits to issuing solicitations to obtain at least 60% of its portfolio to be outsourced to third parties, and includes a plan to meet energy savings goals in the Potential Study. Delaying both PG&E's Business Plan and the third-party solicitations it proposes here will delay achievement of the Commission's goals to outsource the majority of their portfolios to third parties.[139]

TURN argues that PG&E should augment its Business Plan with the additional Tranche #1 savings even through it will necessarily delay the Business Plan and cites as a benefit that PG&E would then avoid "a second, major stand-alone solicitation for 2,000 Gross GWh."[140] PG&E finds it appropriate to address Tranche #1 separately as it has a specific objective of offsetting the loss of energy due to the closure of Diablo Canyon. Whereas, PG&E's Business Plan is designed to already meet the requirements of the Commission's goals for the rolling portfolio for each customer sector and to provide programs and activities that will last through 2025, the Diablo solicitations, by contrast, will be for a defined period and not be part of a rolling portfolio. The Tranche #1 proposal would reach all customer segments, rather than be divided by market sector as the Business Plan does, in order to encourage bids from all customer segments throughout the service area. There would be no benefit arising from seeking approval of the same Tranche #1 solicitations in a different proceeding, when all critical information about the proposal is already submitted in the record of this proceeding. FGC recommends that the Commission take action in this proceeding to authorize PG&E to obtain additional energy

[139] D.16-08-019, p. 73.

[140] TURN Opening Brief at p. 39.

efficiency, and notes that deferring the issue to other proceedings such as the Energy Efficiency Business Plan, the IRP, or the IDER would only result in procrastination and delay.[141]

Parties also object to the lack of inclusion of the Diablo solicitation in the Business Plan for the additional reason that there is no "coordination" between the Business Plan solicitations and the Diablo Canyon solicitations and there may be double-counting of savings.[142] PG&E proposes to address the coordination of the solicitations arising from this proceeding and the Business Plan proceeding upon Commission authorization to proceed with both. Such coordination could take place through the PRG and existing stakeholder forums such as the California Energy Efficiency Coordinating Committee ("CAECC").[143] As PG&E witness Jan Berman testified when ORA raised this issue previously, PG&E currently has processes in place it will leverage to ensure that a customer only receives one rebate from a single programs and that savings are not double counted.[144]

B. Additional Replacement Procurement And the Requested Policy Directive

Under the March 17, 2017 First Amendment to the Joint Proposal, the Tranche #2 procurement proposal to hold an all source solicitation for 2000 GWh of GHG-free energy was withdrawn, deferring the need for additional Diablo Canyon replacement resources (beyond Tranche #1) to the IRP. The Joint Parties also requested as part of the First Amendment that the Commission adopt a policy directive that "the output of Diablo Canyon be replaced with GHG-free resources and the responsibility for, definition of, and cost of these resources be addressed as part of the IRP proceeding."[145]

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[141] FGC Opening Brief at pp. 4-5.

[142] Joint Opponents Opening Brief at pp. 11-12.

[143] Ex. PG&E 5-2 at p. 2-34, line 27 to p. 2-35, line 5 (Berman).

[144] Ex. PG&E 5-1 at p. 2-35, line 20 to p. 2-36, line 15 (Berman).

[145] Ex. PG&E-5-1, Attachment 2-8-1.

Most parties agree with and support the concept of evaluating the need for Diablo Canyon replacement in the IRP. No parties have objected to the proposed policy directive. CEERT and IEP oppose the withdrawal and ask the Commission to approve Tranche #2 (with modifications) in this proceeding.

1. Additional Replacement Procurement Should Be Addressed In The IRP. The Commission Should Not Approve Tranche #2.

PG&E's original proposal to implement Tranche #2 was met with strong opposition. In the initial protests, Parties argued that procurement of GHG-free energy to replace Diablo Canyon should not be done in isolation but should be considered as part of the integrated plan in the IRP. They objected to PG&E procuring on behalf of other Load-Serving Entities ("LSE's") in Tranche #2 (and allocating the costs) and said procurement and cost responsibility of all LSEs would more fairly and uniformly be addressed in the IRP. They asserted that all the parties with a stake in the procurement process were not participating in this proceeding and would be active in the IRP. In response to concerns about timely procurement in the IRP, parties argued that the existing IRP schedule could lead to procurement and development of new resources by 2024 through 2030 and, if delayed, that the Commission was capable of establishing a separate phase of the IRP to address timing issues. PG&E and the Joint Parties considered these points carefully and, eventually, agreed and decided to modify the Joint Proposal. We were convinced that the IRP is the better forum for addressing replacement procurement that needs to be on-line in the 2024 to 2030 timeframe.[146]

CEERT argues that minor delays in the initial schedule in the IRP "confirms that timely replacement of even a modest portion of the Diablo Canyon output with GHG-free energy resources will not be possible if Tranche #2 is deferred to the IRP."[147] We think this is an overstatement. Under the new schedule, PG&E and other LSEs will submit their procurement

[146] This is not true with respect to Tranche #1 which calls for 2,000 GWh of new "early action" energy efficiency to be fully implemented prior to 2025.

[147] CEERT Opening Brief at p. 27.

plans in the first quarter of 2018, rather than by the end of 2017. A decision on the IRP plans is now expected by the end of 2018. This still leaves six to ten years to procure and develop new GHG-free resources.

Next, CEERT makes a convoluted argument that Tranche #2 must be approved because PG&E has not met its burden of proof in demonstrating withdrawal of Tranche #2 and deferral of replacement procurement to the IRP is reasonable. [148] PG&E and the Joint Parties, and all parties to this proceeding, are not bound to their opening positions. All parties are free to agree with issues and recommendations raised by other parties in the proceedings. Indeed, open-minded discourse should be an encouraged means of resolving disputes and narrowing areas of disagreement. PG&E does not have to prove by a preponderance of the evidence that its original idea was unreasonable in order to accept the proposal of an overwhelming majority of other parties in the proceeding.

It should also be pointed out that CEERT does not want to implement Tranche #2, as originally proposed by PG&E and the Joint Parties, and the changes it seeks to make to the process are highly objectionable to PG&E. CEERT would make Tranche #2 the obligation of PG&E's bundled customers and it would exclude the "Clean Energy Charge" cost allocation proposal that was an essential element of the original proposal.[149] Given the uncertainty about the size of PG&E's future bundled customer load and forecasts that show PG&E may only serve 40% of the retail load in its service territory, PG&E does not support proceeding with additional procurement that is not subject to fair and equitable cost allocation to departing bundled customers. This alone is a critical reason why procurement of Tranche #2 should be deferred to the IRP, where procurement responsibility and cost responsibility of all LSEs can be fully addressed.

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[148] *Id.* at pp. 21-28.

[149] *Id.* at pp. 36-37. Shell Energy also talks the position that any authorized replacement procurement in this proceeding should be allocated only to bundled customers. Shell Energy Opening Brief at pp. 2, 6-10.

IEP argues that deferring replacement procurement to the IRP would delay the all-source solicitation to replace a portion of Diablo Canyon's energy and could result in renewable generators being unable to maximize federal tax incentives.[150] In recent history, the tax credits have been extended prior to expiration. While that may not happen this time around, the Commission can consider the issue in the IRP and, if warranted, expedite the procurement process as appropriate to manage costs to customers.

2. No Party Appears To Object To The Policy Directive Regarding GHG-Free Replacement Resources. The Commission Should Not Adopt The Additional Implementation Conditions Proposed By TURN.

The Joint Parties requested as part of the First Amendment that the Commission adopt a policy directive that "the output of Diablo Canyon be replaced with GHG-free resources and the responsibility for, definition of, and cost of these resources be addressed as part of the IRP proceeding."[151] No party appears to object to adoption of this policy directive, but TURN has have suggested that two implementation "conditions" regarding resource eligibility should be hard-wired here rather than evaluated and decided in the IRP.

TURN agrees with the objective of the policy directive but is concerned that, in implementation, LSEs could pursue "a myriad of strategies to create the appearance of replacement without actually accomplishing this result."[152] TURN is thinking ahead about all the potential policy loopholes that could be pursued in the IRP, in particular by LSEs other than PG&E.[153] PG&E believes that TURN has raised some important questions, but the solutions are not as black and white as TURN would suggest.

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[150] IEP Opening Brief at pp. 8-15.

[151] Ex. PG&E-5-2, Attachment 2-8.

[152] TURN Opening Brief at p. 14.

[153] See Transcript, Vol 2, p. 341, line 17 to p. 342, line 28 (Freedman/Malnight)

PG&E believes, as agreed upon by the Joint Parties in the First Amendment, it would be better to adopt a general policy directive here that Diablo Canyon should be replaced with GHG-free resources and leave the important implementation details to the IRP where all stakeholders will have an opportunity to have a say in the resolution of the issues raised by TURN's proposed conditions.

While PG&E has not yet formulated a position on the implementation "conditions" proposed by TURN, it does offer some comments. First, TURN suggests that the full output of Diablo Canyon, all 18,000 GWh, should be replaced with "incremental and newly built GHG-free resources."[154] PG&E does not agree that the Commission, in this proceeding, should establish an 18,000 GWh mandatory procurement requirement of GHG-free replacement energy. In the IRP, PG&E and the other LSEs will perform an optimization of their resource portfolios, which will be consolidated and optimized by the Commission for the electric system. PG&E believes that it is premature to set an overall procurement target independent from the IRP process.[155]

In addition, PG&E believes that the issue of "new" versus "existing" GHG-free replacement resources is similarly nuanced and should be deferred to the IRP:

> Q: How about recontracting with existing zero greenhouse gas resources that PG&E has in its portfolio today but whose contracts will terminate at some point in the future? Would that recontracting, in your view, represent replacement?
>
> A: I think the question of recontracting as [a] tool that would meet that replacement is an interesting question for the IRP to decide. I'm not sure it's really a black-and-white answer. I can certainly see situations in which a plant that would otherwise not – otherwise would shut down could be considered incremental and meeting a new need.[156]

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[154] TURN Opening Brief at p. 14. FOE also supports the policy implementation principle that GHG-free replacement resources should be new. FOE Opening Brief at pp. 7-11.

[155] Transcript, Vol. 2 at p. 333, lines 1-12 (Malnight).

[156] Transcript, Vol. 2 at p. 334, line 21 to p. 335, line 7 (Malnight).

There may be other examples where contracting with existing resources, for example a repowering of an existing unit, might make sense. PG&E believes that it would not be wise at this time to adopt the bright line rule proposed by TURN. All the affected stakeholders need an opportunity to think through in the IRP the permutations and implications associated with the policies for GHG-free replacement of Diablo Canyon.

TURN's "second condition" is that all GHG-free procurement authorized to replace Diablo Canyon should not be used for compliance with the RPS program or any other existing program in order to avoid double-counting.[157] PG&E does not agree with this proposal and believes it could result in overprocurement of replacement resources. As explained in PG&E's direct testimony, existing State and Commission energy policies and priorities are projected to displace the need for a significant portion of Diablo Canyon's output by 2025.[158] To the extent that Diablo Canyon's energy has been or will be displaced by other GHG-free resources such Diablo Canyon energy does not need to be replaced again in order to serve PG&E's bundled load. It is the combination of GHG-free resources that are added to meet State and Commission energy policies and priorities and Diablo Canyon replacement through Tranche #1 and as specified in the IRP that will replace Diablo Canyon. By creating a new GHG-free procurement mandate completely delinked from other GHG-free resource programs, TURN's second condition would cause PG&E and other LSEs to surpass existing and future compliance requirements without regard to their GHG-lowering contributions to the system. This underscores the need to coordinate and optimize resource planning through the IRP. PG&E believes it would be a mistake at this time to adopt the "second condition" proposed by TURN.

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[157] TURN Opening Brief at p. 14.

[158] See PG&E's Opening Brief at pp. 11-13.

IV. PROPOSED EMPLOYEE PROGRAM (ISSUE 2.3)

This Section responds to four parties that addressed the proposed Employee Program in their opening briefs. ORA requests that the Commission deny cost recovery for Tier 1 of the Employee Retention Program, but supports the other elements of the Employee Program.[159] CGNP opposes the Employee Retention Program as unneeded.[160] No party's brief opposed cost recovery for the Employee Retraining Program. A4NR and CCUE submitted briefs in support of the Employee Program. Finally, although they did not all address the Employee Program in post-hearing briefs, the parties to the Joint Proposal[161] and the CIMP[162] support approval of the Employee Program without modification. These additional supporting parties include the City of Arroyo Grande, the City of Atascadero, The City of Morro Bay, The City of Paso Robles, The City of Pismo Beach, The City of San Luis Obispo, The San Luis Coastal Unified School District ("School District"), FOE, NRDC, Environment California, and the IBEW-1245.

EPUC's arguments regarding the ratemaking for the Employee Program are addressed in Section VII, below.

A. The Employee Program Should Be Approved in Its Entirety

The Employee Program provides a fair and equitable set of benefits and incentives to ensure the continuity of the operational excellence that has characterized Diablo Canyon. The proposed Employee Program treats employees fairly and benefits customers by mitigating risk of inefficient operation that may result from the loss of experienced and knowledgeable employees. The level of benefits has also been benchmarked against California and industry-wide data and is reasonably within the ranges of those data.

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[159] ORA Opening Brief at pp. 25-26.

[160] CGNP Opening Brief at pp. 14-17.

[161] Application 16-08-006, Attachment A, Section 3.

[162] *Joint Motion for Adoption of CIMP Settlement Agreement*, filed Dec. 28, 2016, Attachment 1 ("Settlement Agreement"), Section 4.1.

Nonetheless, ORA objects to PG&E's request to recover the costs for Tier 1 of the Employee Retention Program.[163] In this regard, it is important to note that PG&E is not legally obligated under the executed employee retention agreements to fund Tier 1 of the Employee Retention Program if the request for rate recovery from customers is not approved. In fact, if rate recovery is not approved for Tier 1 of the program, PG&E would not plan to offer the proposed Tier 1 Retention Program payment to DCPP employees, which would leave only the Tier 2 Retention Program payments as part of the Employee Program.[164]

Given this factual backdrop, ORA's proposal must be understood as a belief that Tier 1 of the Employee Retention Program is unneeded. That belief should be rejected because ORA has failed to present any factual evidence to rebut PG&E's *prima facie* showing that the Employee Program as a whole is just and reasonable. ORA concedes that its position is merely a "policy-based recommendation" that has no factual support in industry data or personal experience of ORA's witness.[165] ORA's expert has no experience negotiating employee retention agreements and has not discussed the proposed Employee Retention Program with any current PG&E employees working at DCPP.[166] Accordingly, to the extent ORA is asserting that the Employee Program, as proposed, is unnecessary, that assertion is without factual basis and should be rejected. The preponderance of evidence in the record of this proceeding, as summarized in PG&E's Opening Brief,[167] demonstrates that the Employee Program is necessary, just, and reasonable.

Without the Tier 1 Retention payment, PG&E would expect many employees to leave DCPP.[168] In particular, many of PG&E's more experienced employees who have signed

[163] ORA Opening Brief at p. 25; Ex. ORA-7 at p. 4, lines 6-7 (Logan).

[164] Ex. PG&E-5-2 at p. 3-3, lines 24-25 (King).

[165] Ex. PG&E-5-2, Attachment 3-2, p. 3-Atch-3-2-4, Q/A 14.

[166] Ex. PG&E-5-2, Attachment 3-2, p. 3-Atch-3-2-3, Q/A 11 and 12.

[167] PG&E Opening Brief at pp. 37-50.

[168] Ex. PG&E-5-2 at p. 3-4, lines 6-7 (King).

retention agreements pursuant to the Retention Program are retirement-eligible. If Tier 1 of the Retention Program is not implemented, many of these more experienced employees could leave PG&E immediately without financial penalty into retirement.[169] The Tier 1 program helps retain this skilled workforce and allows for years of planning to address the future attrition of this group. If PG&E can successfully retain retirement-eligible employees through Tier 1 of the Employee Program, this will allow for a more structured knowledge transfer from the more tenured employees to the newly hired or less tenured employees.[170] CGNP speculates that although 63% of PG&E's Diablo Canyon employees will become retirement-eligible before 2024, it is "highly unlikely they would be eager to leave when they could continue to work towards retirement."[171] CGNP provides no factual or evidentiary basis for its counter-intuitive conclusion that employees will be eager to spend their retirement years working.

No more convincing is CGNP's argument that PG&E should only offer retention benefits to the subset of employees whose departure CGNP believes could put the plant's operations in jeopardy.[172] PG&E witness James Welsch, who has worked in the nuclear industry since 1979 and has worked in operations or management at Diablo Canyon since 2000, testified that "all functions at DCPP are inter-related."[173] Mr. Welsch explained that even positions that are not considered directly safety-related would be negatively impacted by high levels of attrition in other departments or groups.[174] He provided examples of how attrition in procurement or engineering support could directly impact the ability of other employees to ensure the safe operation of the plant.[175]

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[169] Ex. PG&E-5-2 at p. 3-4, lines 7-11 (King).

[170] Ex. PG&E-5-2 at p. 3-4, lines 12-17 (King); Ex. PG&E-5-2 at p. 3-5, lines 5-10 (Welsch).

[171] CGNP Opening Brief at p. 15.

[172] *Id.*

[173] Ex. PG&E-5-2 at p. 3-13, lines 14-15 (Welsch).

[174] *Id.* at p. 3-13, lines 15-17.

[175] *Id.* at p. 3-13, lines 17-24.

Mr. Welsch and CCUE both emphasize the impact that high levels of attrition at Diablo Canyon would have on workforce morale and the culture of excellence that allows the plant to provide valuable output to PG&E's customers.[176] The remaining employees would likely be expected to work additional overtime to make up for higher levels of attrition, and safety culture is specifically affected by excess overtime.[177] Such overtime can impede strong human performance, which is another key to maintaining a safety culture.[178] Based on Mr. Welsch's extensive experience running a nuclear plant, he testified that the attrition he would expect from rejection of Tier 1 of the Retention Program will make it extremely difficult to maintain the culture of excellence that allows DCPP to run so safely, reliably, and cost-effectively today.[179]

PG&E would also have difficulty recruiting new employees with the appropriate skills in the nuclear industry to replace those who would leave without the Tier 1 Retention payment, as the closure of DCPP is public knowledge, and new hires will need adequate incentive to leave their current positions to work for a plant that has a scheduled closure date.[180] ORA concedes that recruiting new employees may be difficult with the impending retirement.[181] New hires will likely need to be recruited from nuclear facilities located outside California.[182] While CGNP points, without evidentiary support, to workers at other nuclear plants as an allegedly ready labor pool for Diablo Canyon,[183] hiring a large number of new employees from outside the state would be more costly and resource intensive, given relocation and onboarding processes, than retaining the existing employees through the Tier 1 Retention Program.[184] Additionally, as CCUE argues,

[176] *Id.* at pp. p. 3-5, lines 25-28, and 3-13, lines 25-30; CCUE Opening Brief at p. 5.

[177] Ex. PG&E-5-2 at p. 3-5, lines 21-23 (Welsch).

[178] *Id.* at p. 3-5, lines 23-25.

[179] Ex. PG&E-5-2 at p. 3-5, lines 25-28 (Welsch).

[180] Ex. PG&E-5-2 at p. 3-4, lines 18-22 (King).

[181] Ex. PG&E-5-2, Attachment 3-2, p. 3-Atch-3-2-2, Q/A 4.

[182] Ex. PG&E-5-2 at p. 3-4, lines 24-25 (King).

[183] CGNP Opening Brief at p. 16.

[184] Ex. PG&E-5-2 at p. 3-4, lines 25-28 (King).

out-of-state workers will be difficult to recruit given the lack of opportunities elsewhere in California in the nuclear field after Diablo Canyon retires and given the impact that closure of Diablo Canyon will have generally on the standard of living in the surrounding communities.[185]

CGNP argues that high levels of attrition could be alternatively handled through re-hiring retired Diablo Canyon workers, using temporary workers, or resorting to the "local labor pool."[186] PG&E disagrees that it would be prudent or reasonable to rely upon these sources of labor to handle the expected high levels of attrition of qualified, trained personnel in the event that the Employee Retention Program is not approved in full. There is no evidence in the record supporting the proposition that retired employees would be willing to return to work; it is illogical to assume that employees who had already decided to stop working would be willing to return to their prior jobs, now complicated by an environment of high attrition, without any additional incentive. Finally, PG&E disagrees that temporary workers or workers from the "local labor pool" can adequately replace high levels of attrition at Diablo Canyon. Diablo Canyon cannot run reliably and cost-effectively unless employees are appropriately-qualified and capable of performing their specialized duties.[187] Trying to ensure that temporary or "general labor pool" workers meet all of the necessary qualifications prior to initiating work would not be cost-effective, compared to retaining an existing employee through the Employee Program.[188] This is especially true in an environment in which there is high levels of employee attrition: trying to train new employees in an environment in which many or most of their co-workers are also new to their jobs and the industry will inhibit the training process for all.[189] A4NR similarly

[185] CCUE Opening Brief at pp. 3-4.

[186] CGNP Opening Brief at p. 16.

[187] Ex. PG&E-5-2 at p. 3-14, lines 15-18 (King).

[188] *Id.* at p. 3-14, lines 24-27.

[189] *Id.* at p. 3-15, lines 1-14.

identifies the risk that safety problems will arise when there is a lack of experienced employees operating and maintaining a nuclear plant.[190]

Given that the record supports the conclusions that rejection of all or part of the Employee Retention Program would create an unreasonable risk of high attrition and that recruiting knowledgeable and licensed employees from other localities or the local labor pool may be infeasible, the Commission must consider the potential that adopting ORA's or CGNP's proposals could lead to the temporary or permanent closure of the plant prior to expiration of the existing operating licenses. If higher than expected attrition due to the lack of an adequate Employee Program threatened to cause DCPP to be out of compliance or degraded the culture of the plant sufficiently, PG&E would have to shut down the plant, at least until it could rectify the issue through hiring and training, recognizing that providing new employees with the necessary skills and proficiency to take over key positions can take many years.[191] The plant cannot operate under its NRC licenses and applicable regulations if it experiences shortages of certain personnel.[192] Additionally, the loss of a high number of employees in any department or group at DCPP would jeopardize the ability of the plant to continue functioning safely and with excellence since all functions of DCPP are interrelated.[193] Finally, a precipitous shutdown of the plant due to an inability to retain employees would likely result in significant negative customer impacts due to excessive wholesale power market costs, spikes in California's GHG emissions, and harm to the local community and economy.[194] The sudden shutdown of other operating nuclear power plants shows that these impacts are real and likely to occur. For example, in California's recent experience with San Onofre Nuclear Generating Station, Southern California

[190] A4NR Opening Comments at p. 8.

[191] Ex. PG&E-5-2 at p. 3-5, lines 2-5 and 30-34 (Welsch).

[192] Ex. PG&E-5-2 at p. 3-14, lines 1-6 (Welsch).

[193] Ex. PG&E-5-2 at p. 3-13, lines 14-24 (Welsch).

[194] Ex. PG&E-5-2 at p. 3-6, lines 3-12 (Welsch).

Edison Company incurred significant replacement generation costs on behalf of its customers, the sudden demand disrupted short-term wholesale market prices, and the replacement power had significant, measureable GHG impacts.[195]

For the reasons set forth above and in the record of this proceeding, the Commission should reject ORA's policy recommendation to disallow cost recovery for Tier 1 of the Employee Retention Program and should reject on the same grounds CGNP's unsupported assertion that shareholders should bear all costs necessary to maintain adequate staffing at DCPP.[196]

B. The Record Supports Adoption of the Employee Program.

Both ORA and CGNP assert that PG&E has failed to provide evidentiary support for the position that high levels of attrition can be expected without the Employee Program.[197] To the contrary, nearly all of the evidence, and certainly the most credible evidence, in the record of this proceeding concerning the Employee Program supports PG&E's position that the Employee Program is necessary to ensure the continued reliable, safe, and cost-effective operation of Diablo Canyon until its retirement.

Patrick Moloney's uncontested expert opinion, based on independent, third-party benchmarking[198] and approximately 25 years consulting on human resource issues, including roles leading studies of retention programs,[199] is that the Employee Retention Program is in the "middle range of practice for retention plans for business or plant closure."[200] He further opined that the Employee Retention Program is appropriately tailored to the specific circumstances

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[195] Ex. PG&E-5-2 at p. 3-6, lines 13-19 (Welsch).

[196] *See* Ex. CGNP-1 at p. 87, lines 9-11 (Weitzberg).

[197] ORA Opening Brief at p. 26; CGNP Opening Brief at p. 14.

[198] *See* Ex. PG&E-1 at p. 7-10, Table 7-3 (Moloney).

[199] Ex. PG&E-1 at p. PM-1, line 10 to p. PM-2, line 4 (Moloney).

[200] Ex. PG&E-1 at p. 7-10, lines 9-10 (Moloney).

presented by the retirement of Diablo Canyon, including: (1) the long length of time that remains prior to closure; (2) the greater risk of attrition than is typical in a standard merger or acquisition; and (3) the difficulty of replacing the highly-skilled Diablo Canyon workforce.[201] PG&E witness Mary King similarly testified that "[w]ithout the Tier 1 Retention payment, PG&E would expect many employees to leave DCPP."[202] A4NR agrees that attrition is a "real concern" and notes that the Diablo Canyon Independent Safety Committee "has raised doubts based on its collective experience that plant employees will remain in place . . . ."[203] Finally, CCUE witness Tom Dalzell, based on his extensive experience and the hundreds of Diablo Canyon employees he has spoken with over the last five years about their employment concerns,[204] testified that he "knew with certainty that absent an employee retention package employees would find jobs outside of DCPP once a closure date was announced."[205] Mr. Dalzell predicted an "exodus" in the absence of the Employee Retention Program that would result in PG&E having "great difficulty maintaining a workforce that could continue to operate the plant through the end of the license period."[206]

Given the extensive testimony in the record of this proceeding demonstrating the need for the Employee Program, none of which was contested at hearings, the Commission should reject the arguments from ORA and CGNP that the risks of high employee attrition are speculative or unsupported.

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[201] Ex. PG&E-1 at p. 7-10, lines 13-18 (Moloney).

[202] Ex. PG&E-5-2 at p. 3-4, lines 6-7 (King).

[203] A4NR Opening Brief at p. 7 (citing Ex. A4NR-2 at p. 2 (Becker)).

[204] Ex. CUE-1 at p. 2, lines 7-12 (Dalzell).

[205] Ex. CUE-1 at p. 3, lines 2-11 (Dalzell).

[206] *Ibid*.

V. PROPOSED COMMUNITY IMPACTS MITIGATION PROGRAM (ISSUE 2.4)

In this Section, PG&E responds to six parties that filed opening briefs addressing the proposed CIMP. Four parties, including ORA, TURN, CGNP, and GPI, oppose customer cost recovery for some or all of the CIMP.[207] The County of San Luis Obispo ("County") and A4NR filed briefs supporting the CIMP settlement, including cost recovery.[208] Although they did not address the issues in post-hearing briefs, many other parties joined in the CIMP settlement and filed jointly the motion seeking its adoption. These include the City of Arroyo Grande, the City of Atascadero, The City of Morro Bay, The City of Paso Robles, The City of Pismo Beach, The City of San Luis Obispo, the School District, FOE, NRDC, Environment California, the IBEW-1245, and CCUE.

The primary issues raised by parties opposing the CIMP settlement are that customers should not pay its costs because: (1) customers have no obligation to replace or restore declining tax revenue; (2) the timing of mitigation payments is not aligned with the timing of reduced tax revenues; (3) Commission precedent does not require customer funding of the CIMP; (4) the CIMP is akin to charitable donations or corporate expenditures to enhance goodwill; (5) the claim that the record is insufficient to support the need for the CIMP; and (6) PG&E's decision to retire Diablo Canyon is voluntary, and therefore any costs associated with that decision should be borne entirely by shareholders. PG&E strongly disagrees with each of these arguments and will address each in turn.

A. The CIMP is Appropriate Mitigation and Is Not a Tax Payment.

ORA argues that the payments made pursuant to the CIMP "would effectively be a substitute for PG&E's property taxes," and that customer funding of taxes that are not due under law is not reasonable.[209] This argument misunderstands both the intent of the CIMP and how it

[207] *See* TURN Opening Brief at pp. 43-44; GPI Opening Brief at pp. 20-22; ORA Opening Brief at pp. 28-31; CGNP Opening Brief at pp. 17-18.

[208] *See generally* County Opening Brief; A4NR Opening Brief at pp. 8-13.

[209] ORA Opening Brief at p. 29.

was calculated. No party has asserted that the CIMP is a tax obligation that PG&E owes to the local governments; to the contrary, the record makes clear that the CIMP is not intended to be an in-lieu or substitute tax.[210] As its name makes clear, the CIMP is intended to act as reasonable and appropriate mitigation for impacts that will occur to the local economy and ability of local governments to provide essential services due to the retirement of the plant. The decline in tax revenues is one measure of the magnitude of the direct fiscal impacts to local governments, and it was therefore appropriate for the settling parties to consider the size of those tax revenue declines in negotiating the appropriate amount of mitigation. PG&E also considered other measures of the impacts, including the reductions in direct spending and secondary economic impacts that could negatively impact the standard of living in the local area,[211] thereby making it more difficult for Diablo Canyon to retain its workforce and continue operating safely, reliably, and cost-effectively to its last day.

The concept of mitigation payments to local governments is legally distinct from tax payments. Mitigation is a common tool used in impact analyses required by law. For example, under the California Environmental Quality Act ("CEQA"), actions or payments may be required in order to mitigate impacts of a proposed project on the environment.[212] Impact fees may provide an appropriate form of mitigation under CEQA.[213] Solar generation facilities, for example, are generally exempt from property taxes under state law.[214] Accordingly, local governments have assessed impact fees on such facilities in order to fund essential public

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[210] Ex. PG&E-1 at p. 8-4, lines 9-12 (Jones); PG&E-5, p. 4-6, lines 18-19 (Jones); Ex. SLO-2 at pp. 3, line 17 to p. 4, line 2 (Erb).

[211] *See generally* Ex. PG&E-1, Chapter 8, Attachment A (Jones).

[212] *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 391 ("Before approving the project, the agency must also find either that the project's significant environmental effects identified in the [Environmental Impact Report] have been avoided or mitigated, or that unmitigated effects are outweighed by the project's benefits.").

[213] *See, e.g., Gray v. County of Madera* (2008) 167 Cal. App. 4th 1099, 1122 ("Assessment of a traffic impact fee is an appropriate form of mitigation when it is linked to a reasonable plan for mitigation.").

[214] *See* Cal. Rev. & Tax. Code § 73.

services that support the developments as part of CEQA mitigation.[215] Development impact fees are also commonly required when new real estate developments will impose additional burdens on local governments and the essential services that they provide.[216] In such cases, state law requires that there be a "reasonable relationship" between the impact fee exacted and the burden on public services caused by the development.[217]

Although neither CEQA mitigation nor development impact fees apply directly to the ratemaking approval sought in this proceeding, the principles articulated by the courts when implementing these laws that address similar types of community impacts is instructive here. The similarities between CEQA mitigation or development impact fees and the CIMP are readily apparent. Retiring Diablo Canyon at the end of its operating licenses will cause immediate direct fiscal impacts to the local community beginning in 2017,[218] but the need for essential public services to support Diablo Canyon's operations and to remain prepared for any necessary emergency response will remain constant through at least 2025.[219] In the same ways that local governments mitigate environmental and community impacts through the payment of fees pursuant to these other laws, it is appropriate and reasonable in this circumstance for the Commission to approve impact mitigation payments that are reasonably related to the burdens on the local community imposed by Diablo Canyon and its retirement. Just as CEQA mitigation or

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[215] For example, the Final Environmental Impact Report for the Topaz Solar Farm located in San Luis Obispo County contained a mitigation measure for impacts to public services that required the applicant to reimburse the County for the difference between the sales tax revenues associated with the project and the fiscal impacts that it created. *See* Final Environmental Impact Report for the Topaz Solar Farm Project, Vol. 1, p. C.13-10 (Mitigation Measure PS-1.3), March 2011 (available at: http://www.sloplanning.org/EIRs/topaz/FEIR/FEIR/Vol1/C%20files/C13_Public_Services_.pdf).

[216] *See Home Builders Assn. of Tulare/Kings Counties, Inc. v. City of Lemoore* (2010) 185 Cal. App. 4th 554, 561.

[217] *Ibid.*

[218] Ex. SLO-1 at p. 1, line 25 to p. 2, line 23 (Buckshi).

[219] Ex. PG&E-5, p. 4-8, lines 4-8 (Jones).

development fees are not considered tax payments, or substitutes for tax payments,[220] the impact payments proposed in this proceeding are not substitute taxes.

The decline in tax revenues to local governments that results from the depreciation of Diablo Canyon as it nears retirement is relevant, however, since that magnitude of that reduction informs whether the amount of the impact payment is reasonable. As the County notes, the settling parties could not with certainty determine the exact reduction in local tax revenue that will occur because of the complexity of the unitary tax methodology and its dependence on future investments made outside of the San Luis Obispo area.[221] In fact, the County asserted that the reduction in revenues would equal about $97 million,[222] while PG&E, in consultation with the State Board of Equalization, estimated the reduction could be between $65 million and $100 million.[223] The fact that the final negotiated amount for the CIMP falls in the middle of this range of estimates, both of which were informed by the parties' respective discussions with the State Board of Equalization,[224] strongly supports that the CIMP payments are reasonably related to the impacts on public services that the retirement would otherwise cause. The County agrees that the proposed level of funding in the CIMP would support essential services at near-current levels during the transition period.[225]

In sum, the Commission should reject arguments that the CIMP is a tax or substitute tax and should instead find that the CIMP is an appropriate mitigation impact payment that is reasonably related to the impacts that retirement will cause to the local community and is calculated in a manner that ensures the essential governmental services that currently support the

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[220] *See, e.g., Loyola Marymount Univ. v. L.A. Unified Sch. Dist.* (1996) 45 Cal. App. 4th 1256, 1267-1269 (distinguishing property taxes from development fees).

[221] County Opening Brief at pp. 10, 19.

[222] Ex. SLO-2 at p. 4, lines 20-30 (Erb).

[223] Ex. PG&E-4 at p. 4, lines 1-5 (Jones).

[224] *Id.*; Ex. SLO-2 at p. 4, lines 5-8 (Erb).

[225] County Opening Brief at p. 10 (citing Ex. SLO-2, p. 3, line 21 to p. 4, line 2 (Erb)).

safe operation of the plant will continue through the last day of plant operation in 2025 to the benefit of all PG&E customers.

B. The Timing of CIMP Payments Is Appropriate.

ORA argues that the CIMP is unreasonable because the payments are proposed to be paid on a different schedule than the expected tax revenue declines will be realized and that the revenues will be collected from PG&E's customers.[226] ORA's argument regarding recovery of costs is simply wrong,[227] and the payment of fees in advance of impacts is entirely appropriate and consistent with the concept of mitigation.

First, ORA incorrectly states the facts on the timing of payments when it argues that payments under the CIMP would be only about one-third of the revenues collected from customers in 2021.[228] With regard to the Essential Services Mitigation Fund ("ESMF"), the settlement proposes that PG&E will make nine equal annual payments of $8,333,333.33 to the local governments beginning in September 2017.[229] PG&E would recover the cost of the ESMF payments through an annual expense-only revenue requirement of $9.5 from January 1, 2018 through December 31, 2025.[230] With regard to the separate Economic Development Fund ("EDF"), PG&E will have paid the entire $10 million payment in two lump sums within 30 days of a final and non-appealable decision, which is expected prior to the end of 2018.[231] The full recovery of the EDF will occur through a one-time expense-only revenue requirement in 2018.[232] Thus, by the end of 2021, PG&E expects to have made payments under the CIMP of about $51.7

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[226] ORA Opening Brief at p. 30.

[227] It appears that ORA may be referring to the original CIMP proposal, rather than to the CIMP Settlement, which superseded the original proposal.

[228] *Id.* at p. 29.

[229] Joint Motion for Adoption of CIMP Settlement Agreement, filed Dec. 28, 2016, Attachment A to Appendix 1 at p. 1.

[230] Ex. PG&E-4 at p. 2, lines 8-10 (Hoglund).

[231] Joint Motion for Adoption of CIMP Settlement Agreement, filed Dec. 28, 2016, Appendix 2 at p. 1.

[232] Ex. PG&E-4 at p. 2, lines 13-15 (Hoglund).

million[233] and to have collected from customers about $48.1 million[234]. ORA is therefore incorrect when it asserts that PG&E will have collected from customers three times as much as it will have paid by 2021.

A separate issue is how the timing of payments to the local governments will coincide with the expected fiscal and economic impacts. On this issue, ORA is generally correct that the CIMP is designed to provide payments in advance of the expected impacts, which will generally be larger as the plant gets closer to retirement. However, it is common practice for governments to receive impact mitigation fees in advance of the impact occurring, and there is nothing unusual or unreasonable about that practice in this case. Indeed, it would be strange for a government to receive fees that are meant to mitigate an impact only after that impact, which may be irreparable, has been realized. In this case, the timing of the CIMP payments is appropriate since it allows the local governments to prepare for, and therefore to avoid, the cuts in essential public services that would otherwise take place while those services are still needed to support the operating plant.[235]

C. The CIMP is Consistent with Commission Precedent and Legislation.

ORA argues that the Commission's precedent of approving a $10 million payment to the Diablo Canyon community during the restructuring that occurred in the 1990s does not compel the Commission to approve the present CIMP proposal.[236] PG&E agrees that the prior mitigation payment is not binding on the Commission in this case and, in fact, as the County asserts, is factually distinguishable because the Commission determined in that case that the

[233] The calculation is as follows: ($8,333,333 Annual Payment *5 years = $41.7 million) + ($10 million EDF Payment in 2018) = $51.7 million.

[234] The calculation is as follows: (Annual ESMF RRQ of $9.5 Million * 4 years = $38 million) + (10.1 million EDF RRQ in 2018) = $48.1 million.

[235] *See* Ex. SLO-1 at p. 2, lines 7-11 (Buckshi); Ex. SLCUSD-1 at p. 4, line 17 to p. 5, line 14 (Prater).

[236] ORA Opening Brief at pp. 30-31.

payment was actually an in-lieu tax payment that required legislative approval.[237] While, as described above, the CIMP payments are not substitute or in-lieu taxes, the legislature's approval of the earlier payment, which resulted in the Commission's subsequent approval of rate recovery for the payment,[238] supports the approval of the CIMP payments in this case. Unlike the earlier restructuring-era payment, the CIMP payments do not require legislature action since they are not in-lieu taxes. However, the general principle established in the earlier case that economic and fiscal impacts brought about by changes in the depreciation schedule for Diablo Canyon should be recovered from the customers that have benefitted from Diablo Canyon's output applies to the mitigation payments proposed in this proceeding. As A4NR notes, the legislature recently made clear again that mitigation of local impacts arising from Diablo Canyon's retirement is a matter of public interest.[239]

D. The CIMP is Neither Charitable Giving Nor Corporate Goodwill Enhancement.

TURN repeats arguments that it made jointly with ORA in comments on the CIMP settlement that characterize the CIMP as a charitable contribution and an effort to enhance PG&E's public image.[240] PG&E has responded twice to these arguments,[241] explaining at length how the CIMP payments are legally and factually distinguishable from corporate charity, and for the sake of brevity PG&E will not repeat its arguments again in these reply comments given that TURN cites no new authority and makes no new legal arguments. PG&E agrees with the County's analysis and conclusion that the CIMP is neither a gift nor a donation under applicable

[237] County Opening Brief at p. 19; D.97-08-055, 72 CPUC 2d 560, 602; 1997 Cal. PUC LEXIS 453, *100.

[238] *See* Resolution E-3535.

[239] A4NR Opening Brief at p. 10; Cal. Pub. Util. Code § 712.5 (codifying SB 968, the "Monning Bill").

[240] TURN Opening Brief at p. 43.

[241] PG&E Reply to Comments on Joint Motion for Adoption of Settlement, filed Mar. 17, 2017, at pp. 9-14; PG&E Opening Brief at pp. 62-69.

precedent.[242] It is worth noting that TURN fails to cite any evidentiary support for its allegation that PG&E's intention in proposing the CIMP is to acquire corporate benefit in the form of goodwill.[243] TURN's speculative assertion should be disregarded given the lack of support for it in the record.

E. The Record Supports Approval of the CIMP

GPI reiterates its concern that the Commission has no factual basis to determine the reasonableness of the settlement without first implementing the Monning Bill or otherwise requiring an independent economic analysis of the community impacts.[244] PG&E disagrees with GPI's concern on both legal and factual grounds. From a legal perspective, the Scoping Memorandum issued in this proceeding makes clear that the Monning Bill will be implemented separately from this proceeding and on a different timeline.[245] That determination was based in part on a letter sent by Senator Monning to be read at the Public Participation Hearing held in this proceeding, in which the Senator stated: "The economic assessment required under SB 968 was never intended to impact or be part of the discussions and decisions being considered under Application 16-08-006."[246] The Scoping Memo found that the Senator's statement was consistent with the language in SB 968 itself.[247]

From a factual perspective, GPI is incorrect that the record of this proceeding lacks an adequate evidentiary basis for the Commission to determine that the CIMP is reasonable. PG&E's Prepared Testimony attaches a detailed economic study of the impacts to the community that are expected to result from a closure of the plant.[248] Additionally, PG&E's

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[242] *See* County Opening Brief at pp. 17-19.

[243] TURN Opening Brief at p. 43.

[244] GPI Opening Comments at pp. 21-22.

[245] Scoping Memo at p. 5.

[246] *Ibid.*

[247] *Ibid.*

[248] Ex. PG&E-1, Chapter 8, Attachment A (Jones).

Supplemental Testimony, along with the testimony of the County and District, provide a substantial factual record for assessing the likely fiscal impacts to the local community of retiring Diablo Canyon and how those impacts would be mitigated by the CIMP.[249]

F. CIMP Costs Are Properly Recovered from Customers because Customers Will Benefit from Diablo Canyon's Retirement.

CGNP argues that "no conceivable justification" exists for the CIMP costs to be recovered from PG&E's customers.[250] CGNP appears focused on what it believes is PG&E's "voluntary abandonment" of Diablo Canyon through retirement.[251] The premise of CGNP's argument against cost recovery for the CIMP is therefore its primary argument that PG&E's decision to propose retiring the plant was unreasonable. PG&E has explained why it disagrees with CGNP's view on the need for and cost to replace Diablo Canyon's output in Section II, above. If the Commission agrees with PG&E and all other parties in this proceeding other than CGNP that it is in the customers' interest and to their long-term benefit that Diablo Canyon be retired, then CGNP's argument against cost recovery for the CIMP must also fail. If, on the other hand, the Commission were to agree with CGNP that Diablo Canyon should be relicensed, then CGNP's opposition to the CIMP cost recovery would be rendered moot given that the CIMP settlement would terminate by its own terms and there would be no costs to recover.

In claiming to find no justification for customers to pay for the CIMP, CGNP fails to acknowledge the ample evidence in the record that customers have benefited in the past from Diablo Canyon's operation and will continue to benefit through its last day of operation. While DCPP will continue to run and require the same level of support from the community and public services through 2025, the CIMP recognizes that the depreciation of the plant will reduce dramatically the revenues that local governments require to provide these same essential services

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[249] *See generally* Ex. PG&E-4 (Jones); Ex. SLO-1 (Buckshi); Ex. SLO-2 (Erb); Ex. SLCUSD-1 (Prater).

[250] CGNP Opening Brief at p. 17.

[251] *Ibid.*

over the remaining life of the plant. These essential services directly support and enable the safe, reliable, and cost-effective operation of the plant today, and they are necessary to the continued operation of the plant until it is retired. Accordingly, the CIMP is tailored to simply stabilizing, at historic levels, the current fiscal situation in the local community during the 9-year transition period while DCPP is still operating.[252] In this regard, the CIMP should be viewed as a necessary cost to continue operating the plant through the end of its licensed life.[253] Customers will benefit from the continued safe, reliable, and cost-effective operation of the plant, and since that operation depends upon the continued provision of essential community and public services, it is appropriate for customers to bear the costs of mitigating the impacts that would otherwise cause the local governments to reduce or eliminate essential services.[254] A4NR correctly recognizes the link between the CIMP and Diablo Canyon's ability to continue operating,[255] and PG&E agrees with A4NR's observation that "the cost burdens of the [CIMP] pale in comparison to the value of the capacity and energy received by customers . . . and are equally miniscule compared to the burdens borne by the citizens living near [Diablo Canyon]."[256] For all of the reasons set forth above, it is appropriate and reasonable for the cost of the CIMP to be recovered from customers.

VI. RECOVERY OF LICENSE RENEWAL COSTS (ISSUE 2.5)

On May 23, 2017, PG&E, A4NR, TURN, ORA, Mothers for Peace, and the other Joint Parties filed a motion for adoption of a settlement regarding the recovery of license renewal costs. ALJ Allen issued a ruling by email on May 19, in which he directed that parties are not required to brief the issue of license renewal cost recovery, but instead may respond to the

[252] Ex. PG&E-5-2 at p. 4-7, lines 11-13 (Jones).

[253] Ex. PG&E-5-2 at p. 4-7, lines 13-15 (Jones).

[254] Ex. PG&E-5-2 at p. 4-7, lines 15-20 (Jones).

[255] A4NR Opening Brief at p. 11.

[256] *Id.* at p. 12.

proposed settlement. Consistent with ALJ Allen's ruling, no party briefed the issue of whether the license renewal cost settlement should be approved. PG&E will respond to parties' comments on the settlement when it files reply comments pursuant to Rule 12 of the Commission's Rules.

VII. PROPOSED RATEMAKING AND COST ALLOCATION ISSUES (ISSUE 2.6)

A. Rate Making Process For Diablo Canyon

In the Application, PG&E proposes to implement an annual ratemaking process for updating the depreciation and capital spending revenue requirements for Diablo Canyon adopted by the Commission in the 2017 General Rate Case.[257] This proposal was revised in a stipulation between A4NR and PG&E that requires PG&E to provide additional information in its annual advice letter regarding new capital projects or cost exceedances in excess of $20 million.[258]

No party has contested or objected to this ratemaking proposal for Diablo Canyon.

PG&E's ratemaking proposal for Diablo Canyon also contains a recommendation for recovery of cancelled capital projects, which is the subject of a settlement agreement submitted to the Commission on May 23, 2017. PG&E will respond to parties' comments on the settlement when it files reply comments pursuant to Rule 12 of the Commission's Rules.

B. All PG&E Distribution Customers Should Fund Tranche #1.

In their testimony, California Large Energy Consumers Association (CLECA), Joint Intervenors, and CCSF agreed that the costs of Tranche #1 EE procurement should be recovered through the PPP rate component.[259] EPUC opposes PG&E's proposal to collect Tranche # 1

[257] See PG&E Opening Brief, pp. 70-71.

[258] A4NR Opening Brief, pp. 15-17; Ex. PG&E-5-2, p. 6-5, lines 1-26 (Marre).

[259] CLECA states: "PG&E proposes to recover its costs of EE in Tranches 1 and 2 via the PPP. I do not object to the use of the PPP. The appropriate allocator for the PPP is addressed in each utility's General Rate Case Phase 2 and whatever allocator is adopted for the PPP for PG&E in its pending or subsequent GRC Phase 2 cases should be used to allocate the PPP among classes and to DA, CCA, and bundled customers." Ex. CLECA-1 at p. 39, A41 (Barkovich).

costs from all distribution customers through the Public Purpose Program ("PPP") charge, and instead, requests that the costs only be recovered from bundled service customers.[260] EPUC argues that because bundled customers benefit from DCPP, only bundled customers should pay for Tranche #1.

PG&E's proposal to recover Tranche #1 costs through the PPP is consistent with California Law and current practice. PG&E recovers the costs of its energy efficiency programs as a non-bypassable distribution charge, consistent with California law. Public Utilities Code Section 381(a) requires the costs for energy efficiency programs be recovered through a separate rate component that is "a nonbypassable element of the local distribution service and collected on the basis of usage." The Commission has implemented this statutory mandate by creating the electric PPP non-bypassable charge. PPP charges have been established as a non bypassable distribution rate component to ensure that all distribution customers contribute. This approach supports the State's and the CPUC's policy goals for EE by ensuring that all distribution customers contribute to PPP and are eligible to participate in EE programs.[261] PPP charges recover energy efficiency program costs through a non-bypassable distribution rate charge which all distribution customers pay.[262]

The Tranche #1 energy efficiency will benefit all customers in PG&E's service area through the procurement of GHG-free resources, consistent with California and Commission policy goals.[263] Moreover, all customers, including CCA and DA customers, are eligible to participate in the Tranche #1 solicitation or programs.[264] Because all customers can participate, all customers should pay the associated Tranche #1 costs consistent with Public Utilities Code

[260] EPUC Opening Brief at pp. 13-14.

[261] Ex. PG&E 5-2 at p. 6-7, lines 17-21 (Berman).

[262] Ex. PG&E-5-2 at p. 6-7, lines 17-21 (Berman).

[263] Ex. PG&E-5-2 at p. 6-7, lines 17-21 (Berman).

[264] Ex. EPUC-X2 at p. 1; *see also* Ex. PG&E-5-2 at p. 6-8, lines 1-8 (Berman).

Section 381 (a). If this proceeding limited cost recovery for Tranche # 1 to PG&E's number of declining bundled service customers, it would be contrary to Section 381(a).

Shell Energy also argues that only bundled service customers should pay for replacement resources because the energy efficiency would be intended to replace a power plant that is funded by bundled service customers.[265] Shell Energy asserts, incorrectly, that there is no statutory requirement to replace the output of Diablo Canyon with energy efficiency resources. To the contrary, Public Utilities Code Section 454.5 (b)(9)(C) requires PG&E to ". . . . first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, feasible and reliable." PG&E's proposal to first meet any unmet resource needs arising from the closure of Diablo Canyon with energy efficiency is consistent with this statutory mandate to acquire energy efficiency before seeking procurement resources.

EPUC also asserts that the Commission Staff has issued a Guidance Document that inappropriately limits EE funding available to customers with on-site generation.[266] To the extent EPUC believes that Commission Staff has improperly limited the participation of any customers in EE programs, EPUC should raise this issue in the Energy Efficiency Rulemaking so that any resolution of this issue broadly applies to all energy efficiency programs, rather than seek to resolve this issue in this proceeding.

C. Ratemaking for Employee Program

While EPUC does not take a position on the propriety of the Employee Program in general,[267] it argues that departed load customers do not receive the benefit of output from DCPP and that the proposed Employee Program costs are unrelated to nuclear decommissioning.[268] For

[265] Shell Energy Opening Brief at pp. 6-7.

[266] EPUC Opening Brief, pp. 14-15.

[267] EPUC Opening Brief at p. 12.

[268] EPUC Opening Brief at p. 12; Ex. EPUC-1 at p. 6, line 22 to p. 7, line 17 (Brubaker).

these reasons, EPUC argues the costs should not be recovered through the ND NBC.[269] PG&E disagrees with EPUC since the Employee Program would not be necessary but for DCPP's retirement and because all customers, both current bundled customers and those customers that have departed for service from other retail sellers, have benefited and will continue to benefit from DCPP's operation.

The Legislature has already addressed as a general matter the issue of whether employee-related costs should be included as part of decommissioning and therefore allocated to all customers. The California Legislature has found that employees of nuclear facilities that are being closed are "entitled to reasonable job protection" and that the costs of such programs are to be considered decommissioning costs.[270] Additionally, the Legislature has declared that costs to help transition employees to new positions, like those proposed as part of the Employee Retraining Program, are specifically recoverable.[271] These provisions provide strong statutory support for approval of the Employee Program, including recovery of costs in decommissioning rates, consistent with the Commission's precedent of approving the recovery of costs for the Employee Severance Program in the NDCTP.

Moreover, as a policy matter, all of PG&E's customers, including those who have since departed from bundled service, have benefited from the more than three decades that DCPP has operated successfully during 90% of all hours.[272] Customers benefited then, and continue to

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[269] EPUC Opening Brief at p. 12; Ex. EPUC-1 at p. 4, lines 11-17 and p. 7, lines 4-17 (Brubaker).

[270] Cal. Pub. Util. Code § 8322(g) ("The Legislature finds and declares all of the following . . . (g) Decommissioning nuclear facilities causes electric utility employees to become unemployed through no fault of their own, and these employees are entitled to reasonable job protection the costs of which are properly includable in the costs of decommissioning.")

[271] Cal. Pub. Util. Code § 8330 ("Every electrical utility involved in decommissioning, closure, or removal of nuclear facilities, shall provide assistance in finding comparable alternative employment opportunities for its employees who become unemployed as the result of decommissioning, closure, or removal. The commission or the board shall authorize the electrical utility to collect sufficient revenue through electric rates and charges to recover the cost, if any, of compliance with this section.")

[272] Ex. PG&E-5-2 at p. 3-11, lines 16-18 (Welsch).

benefit now, from the reductions in GHG emissions that would otherwise have occurred had DCPP's output been provided instead by fossil-fueled baseload generation.[273]

EPUC does not salvage its argument by pointing out that wages paid to Diablo Canyon employees in the ordinary course of business are recovered through generation rates rather than through the ND NBC.[274] The Employee Program is clearly distinct from wages paid in the ordinary course of business. The only reason the Employee Program is necessary is due to the announcement that PG&E would retire and decommission the plant. Accordingly, there is a direct causal link between the closure of the plant and the Employee Program, making it appropriate to recover the costs of the Employee Program through decommissioning rates. Given the benefits that have accrued to all customers in the past from Diablo Canyon's operation, the benefits that will continue to all customers in the future, the applicable statutory framework, and the clear link between retirement and the need for the Employee Program, the Commission should approve PG&E's ratemaking proposal.

D. Ratemaking for Community Impact Mitigation Program

PG&E replied to comments regarding whether the costs for the CIMP should be recovered from customers in Section V, above. No other ratemaking issues associated with the CIMP were raised in opening briefs.

VIII. LAND USE, FACILITIES AND DECOMMISSIONING ISSUES (ISSUE 2.7)

GPI recognizes that the present proceeding is not the appropriate venue for the full consideration of decommissioning-related issues, and that the 2018 NDCTP is the primary forum for such matters.[275] Nevertheless, GPI argues that "decommissioning and long-term storage of nuclear waste should not be considered out of scope in this proceeding, even if this is not the

[273] Ex. PG&E-5-2 at p. 3-11, lines 19-21 (Welsch).

[274] EPUC Opening Brief at p. 13.

[275] GPI Opening Brief at p. 23.

primary venue for resolving such issues."[276] PG&E would contest GPI's assertion, but GPI itself recognizes that the issue is moot since no party has raised any substantive decommissioning-related, facilities, or land use issue requiring a Commission determination.[277]

IX. ADDITIONAL ISSUES (ISSUE 2.8)

A. CGNP's Arguments Regarding PG&E's Modification of Its Replacement Power Proposal And The Need For A Coastal Development Permit Were Already Raised By Motion And Properly Rejected By The ALJ.

In its Opening Brief, CGNP reargues two issues that were raised by motion during the course of the proceeding and properly rejected by the Administrative Law Judge.

First, CGNP asserts that PG&E improperly "re-scoped" the proceeding when proposed that additional replacement power (beyond Tranche #1) be addressed in the IRP. CGNP argues that (1) these changes should have been made through a formal amendment to the Application and/or (2) PG&E's actions improperly modified the Scoping Memo in the proceeding.[278] CGNP made these same arguments in a motion date April 6, 2017 in the proceeding, PG&E responded to the motion on April 18, 2017[279] and the Administrative Law Judge denied the motion on April 19, 2017.[280] Briefly, PG&E did not amend its application. After reviewing opening testimony and considering the arguments and issues raised, PG&E decided to withdraw the Tranche #2 and Tranche #3 proposals in testimony (and the associated Clean Energy Charge). Parties were not prejudiced by this modification of testimony as PG&E served the revised testimony three weeks before CGNP's rebuttal testimony was due and ALJ Allen clarified that parties would be free to

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[276] *Id.*

[277] *Id.*, at pp. 22-23.

[278] CGNP Opening Brief, pp. 8-11.

[279] Rather than repeating the arguments already submitted into the record, PG&E incorporates by reference its April 18, 2017 response.

[280] "I thought PG&E handled their shift in position or their no longer so enthusiastic support of Tranche 2 and Tranche 3 appropriately, so I'm deny that motion. So I'm not censuring PG&E and I'm not delaying the proceeding." Tr. Vol. 2 at p. 186, lines 17-27 (ALJ Allen).

continue to advocate for (or against) these proposals in the proceeding. Additionally, PG&E has proposed that additional replacement power issues be transferred to the IRP. If PG&E's proposal is adopted, CGNP will have a full opportunity to participate in the IRP and be heard on these issues.

CGNP's argument that PG&E has "re-scoped" the proceeding is equally without merit. The scoping memo lists "proposed replacement procurement" as an issue for the proceeding and states that "[p]arties may present testimony supporting alternative procurement proposals, including proposals that all necessary replacement procurement should be addressed in this proceeding, that no replacement procurement should be addressed in this proceeding or that some replacement procurement should be addressed in this proceeding."[281] PG&E's revised replacement procurement proposal is clearly within the existing scope of the proceeding.

Second, CGNP argues that PG&E needs to obtain a Coastal Development Permit ("CDP") from the California Coastal Commission authorizing PG&E to proceed with the decommissioning construction project in the Coastal Zone before it can make any resource planning recommendations on the future of Diablo Canyon to the CPUC.[282] Importantly, PG&E is not seeking Commission approval to commence the decommissioning of Diablo Canyon in this application. The application is an exercise in resource planning that seeks Commission approval of a recommendation to retire Diablo Canyon at the termination of its NRC operating licenses. If that recommendation is approved, PG&E will commence planning for the decommissioning project and will submit in late 2018/early 2019 its site-specific Diablo Canyon

[281] Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, at p. 2 (dated November 11, 2016) A.16-08-006.

[282] CGNP Opening Brief at pp. 12-14. CGNP filed a motion, dated march 29, 2017, asking for the Commission to stay or dismiss this proceeding until PG&E obtains a CDP, exactly the same request that is in its brief. PG&E filed a response to the motion on April 10, 2017. Administrative Law Judge Allen denied the motion on April 19, 2017. "I am denying that motion. It's not clear to me that PG&E does need [to] get a Coastal Development Permit. And staying this proceeding or suspending it while waiting for PG&E to get a permit they may or may not need does not seem efficient or productive, so that motion is denied." Tr. Vol. 2 at p. 186, lines 7-16 (ALJ Allen).

decommissioning plan in the Commission's Nuclear Decommissioning Costs Triennial Proceeding. It is only after the site-specific plan (and the associated cost estimate) has been reviewed and approved by the Commission (and the construction project has been defined and scoped) that PG&E will obtain a CDP to proceed with the decommissioning construction project. Under this process, development, i.e., commencement of the demolition of Diablo Canyon, will not and cannot commence until after a CDP is obtained. CGNP is essentially arguing that one must obtain a building permit before deciding to purchase a lot or engaging an architect to discuss potential home designs. Approval of this application will not cause development to occur in the Coastal Zone; there are a number of future discretionary decisions that will be required, including obtaining a CDP, before demolition of Diablo Canyon can commence.

X. CONCLUSION

PG&E respectfully requests that the Commission issue an order approving PG&E's Application, as modified through its testimony and two settlement agreements, to retire Diablo Canyon Power Plant, mitigate adverse impacts of plant closure on employees and the local community, authorize early action EE and provide policy direction specifying that the IRP shall require the replacement of Diablo Canyon with GHG-free resources.

PG&E requests that the Commission issue an order approving and authorizing PG&E to proceed with the following recommendations and requests:

1. Recover $1.3 billion for administration and acquisition of the new Tranche #1 energy efficiency procurement as authorized energy efficiency funding, subject to return of all unspent funds, over a 7 year period through an annual expense-only revenue requirement of $187 million beginning January 1, 2019 through December 31, 2025 through the electric PPP rate component.
2. Issue a policy directive that the output of Diablo Canyon be replaced with GHG-free resources and the responsibility for, definition of, and cost of these resources be addressed as a part of the IRP.

3. Recover $352.1 million in costs associated with retaining approximately 1,500 employees at Diablo Canyon to ensure the plant's continued safe and efficient operation through the end of each unit's license in 2024 and 2025, respectively, over a 7 year period through an annual expense-only revenue requirement of $50.9 million beginning January 1, 2018 through December 31, 2024 through the ND NBC.

4. Implement the Employee Severance Program and authorize PG&E to continue to forecast and recover the cost of the Employee Severance Program in each subsequent NDCTP.

5. Recover $11.3 million in costs associated with retraining eligible employees at Diablo Canyon and to recover these costs over a 5-year period through an annual expense-only revenue requirement of $2.3 million from January 1, 2021 through December 31, 2025 through the ND NBC.

6. Approve the settlement reached concerning the Community Impact Mitigation Program as consistent with the standards set forth in Rule 12 of the Commission's Rules. In particular, the Commission should authorize PG&E to:

a. Recover $75 million to fund an Essential Services Mitigation Fund, as described in the CIMP settlement, through an annual expense only revenue requirement of $9.5 million beginning January 1, 2018 through December 31, 2025 through the ND NBC.

b. Recover $10 million to fund the Economic Development Fund, as described in the CIMP settlement, through a one-time expense-only revenue requirement of $10.1 million from January 1, 2018 through December 31, 2018 through the ND NBC.

c. Continue providing emergency preparedness support to the state and local community during the decommissioning process and authorize PG&E to forecast and recover the associated costs in each subsequent NDCTP, subject to the proposed stakeholder review.

7. Approve, subject to the separate commenting schedule established in this proceeding, the settlement reached concerning the recovery of costs associated with the License Renewal Project and any other cancelled projects at Diablo Canyon in the future as consistent with the standards set forth in Rule 12. In particular, the Commission should authorize PG&E to:
    a. Recover a total of $18.6 million related to the License Renewal Project through an annual, levelized, expense-only revenue requirement to be recovered from customers over an 8-year period from January 1, 2018, through December 31, 2025, through the generation rate component of PG&E's rates.
    b. Subject to the filing and approval of the annual Tier 3 Advice Letters described in the settlement and in Recommendation 9, below, authorize the following mechanism with regard to the recovery of costs associated with cancelled projects at Diablo Canyon:
        (i) PG&E should be authorized to recover 100% of the direct costs associated with cancelled capital projects at Diablo Canyon recorded to the project as of June 30, 2016;
        (ii) PG&E should recover 25% of the direct costs associated with cancelled capital projects at Diablo Canyon recorded to the project on or after June 30, 2016, and the remaining 75% of the direct costs recorded to any such cancelled project after June 30, 2016, should not be recovered from customers;
        (iii) PG&E should not be authorized to recover Allowance for Funds Used During Construction ("AFUDC") associated with any such cancelled projects, regardless of whether the AFUDC was accumulated before or after June 30, 2016

(iv) All such cancelled project costs should be through an annual expense-only revenue requirement from the time the cancellation decision is made through December 31, 2024.

8. Authorize PG&E to establish a new two-way balancing account, the Diablo Canyon Retirement Balancing Account, effective January 1, 2017, with the following subaccounts:

   a. Diablo Canyon Capital Depreciation Subaccount to recover DCPP Units 1 and 2 full book value by the time the units cease operations on November 2, 2024 and August 26, 2025, respectively, or by December 31, 2024 should the State Water Resources Control Board ("SWRCB") not grant PG&E's request to continue once-through cooling operations for Unit 2 beyond December 30, 2024.

   b. Employee Retention Program Subaccount to administer recovery of $352.1 million in costs associated with retaining PG&E's employees at Diablo Canyon for the remainder of plant operations.

   c. Employee Retraining Program Subaccount to administer recovery of $11.3 million in costs associated with retraining eligible employees at Diablo Canyon.

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9. Authorize PG&E to update the Diablo Canyon capital revenue requirement annually to reflect the forecast annual gross additions as provided in PG&E's GRC and to true-up the previous year's authorized revenues with actual capital revenue requirements through a Tier 3 advice letter to be filed in May of each year through the remainder of DCPP's licenses.

Respectfully submitted,

By: */s/ William V. Manheim*
WILLIAM V. MANHEIM

Pacific Gas and Electric Company
77 Beale Street, B30A
San Francisco, CA 94105
Telephone: (415) 973-6648
Facsimile: (415) 973-5520
E-mail: wvm3@pge.com

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

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